



**International Embryo Transfer Society**  
Parent Committee on Companion Animals,  
Non-Domestic & Endangered Species  
**(CANDES)**

Report to the IETS Board of Governors  
7 January 2005

Radisson SAS Falconer Hotel, Copenhagen, Denmark

**Report from the Working Meeting (7 January 2005)**

Bill Holt chaired the committee, due to the fact that Naida Loskutoff's flight was delayed. All four committees combined into one group for the working meeting. Seven members and one guest were present: Phil Damiani, Morne De La Rey, Roslyn Elliott, Bill Holt, Rebecca Krisher, Reuben Mapletoft, Damien Paris and Monique Paris (see Appendix 1 for affiliations and contact details).

Discussion of a possible working meeting in South Africa in 2005 to consider potential research programs for SA and review CANDES progress. Possible dates were discussed. It was thought that only chairs would attend. The best months for those present were thought to be June, July or August. The next wildlife symposium is to be held in conjunction with SSR, consisting of a one-day program on the 29th July 2006.

**Health and Safety Subcommittee**

A successful meeting was held in Omaha in 2003. Sample situations were modeled using a software program to assess risk. The follow up meeting at White Oak did not occur. The software modeling system used is called Precision Tree. In this program, risks and decisions can be input at each step of the decision making process. The program then calculates overall risk probabilities. Critical checkpoints include probabilities of disease transmission. Precautions taken to decrease the probability of disease transmission are taken into consideration in the program. This software was thought to be very appropriate. More follow up work needs to be done.

One of the questions is how to get the results/risk probabilities to the people making decisions? Could help governments make educated decisions. OIE has scientifically set standards. Individual governments must make the decision to follow the assessments or not. Must get comfortable with the science. It is important in this regard to use the program and show that it works. Must apply it to already used and known scenarios. It was emphasized that Precision Tree can be used as a general tool for assessing risks.

## **Regulatory Subcommittee**

Justine O'Brien sent notes, as she was not able to be here. Templates have been checked and there are no changes. New information has been added to the website mid 2004, specifically for the United Arab Emirates. In the future, the question is how to keep the site updated, current and accurate. There is also still a need to identify a contact in the UK. Bill Holt suggested that he would be contacted by the regulatory subcommittee to give information/contact details on this. Also, the subcommittee would like to determine the number of hits on the site.

## **Research Subcommittee**

An update on the resource manual was given by Monique Paris and Rebecca Krisher. There are now 21 protocols in the resource manual. We discussed alternative ways to continue to add protocols. One problem is that investigators seem willing to contribute but do not send materials. We thought it was probably just a low priority in busy peoples schedules. Damien Paris raised the point that there was very little incentive for researchers to disclose their 'secret recipes' to the greater scientific community with no obvious benefit, and concluded that it would be more likely that already published protocols would be more easily offered by contributors. Morne De La Rey offered to contribute his protocols for rare cattle breeds. It was suggested that we ask Naida to plug the need for more new protocols in her speech to the general IETS members on the 11<sup>th</sup>.

In reference to the resource manual, it was suggested that we emphasize acknowledgement of sources in resulting publications as an incentive for investigators to contribute their protocols. It was decided to put greater emphasis on this point on the website. In addition, we will ask the taxa leaders as a goal to contribute 1 protocol every 6 months, so at least 2 new protocols per year get added for each taxon.

A suggestion was made to put together an abstract/manuscript database for this purpose. When someone is looking for a protocol, if the specific protocol is not in the resource manual online, the abstract database could be searched. If a reference was found containing the desired protocol, the person in need could contact the authors directly to ask for the protocol. This was discussed and thought to be a good idea. Rebecca and Monique will begin to compile the database over the next several months. Those who have an endnote database of CANDES species said they could contribute to this effort.

In addition, we would like to track users of the resource manual on the website. The suggestion was put forward to ask users to register before they could access the manual. Everyone could register and access with no charge, but it would allow us to see who was using the resource, and might encourage investigators to acknowledge contributors. Rebecca will ask Naida if this is possible to add to the website.

Several taxa leaders are still needed. Fish: Boris Dzuba was suggested, he had already expressed interest but needs to be approached officially. Birds: Suggestions

included Juan Blanco (Spain), someone from Audobon Institute (USA) because of their interest in AI in cranes (Meghan or Jeff Vicaro), Graham Martin working on emu/ostrich reproduction (Australia), Stephen from the International Crane Foundation and Graham Bushhardt (Dundee, UK). Marine mammals: Todd Robeck could be approached again, or someone from Australia who is studying seals (Simon Goldsworthy, John Arnould, Steve Johnson).

The second objective of the research subcommittee was addressed. This objective has as its goal a compilation of emphasis areas that are high priority for research in conservation of CANDES species. We need to be sure there is not a personal bias involved in this 'list', but that it reflects real IUCN needs. It was proposed to make a big list then prioritize. Reuben Mapletoft questioned whether CANDES was actually the most qualified body to prioritize a list of key species for research? It was also discussed why this list was important, if we should continue with this objective, and what would be the outcome. Would anyone use the list? Given the breadth of species covered by CANDES it was suggested that our efforts would be spread too thinly if we set about trying to prioritize areas of ART research without first assessing what has already been achieved in CANDES and their domestic counterparts. Reuben Mapletoft recommended that the Research and Technology committees need to review their objectives, making them more focused and more achievable. It was decided that our approach would be to compile a list/database of known technologies already successfully developed in both domestic and CANDES species. We hope that as an outgrowth of this list/database of known technologies (more likely currently used in closely related species), the pressing needs for new ART technology and species in which there is a deficit of these technologies will become evident. The list will thus be categorized by ART technology not by taxa. It was realized that this is a significant overlap with the Technology subcommittee's goals, and that the 2 committees could work together to achieve this common objective, each with a slightly different focus. We want the list to correlate with the protocol resource manual of the Research Subcommittee and at the same time relate to the top 10 list of priority technologies for development proposed by the Technology Subcommittee. Phil Damiani has already compiled an extensive Endnote library of abstracts to this effect and Bill Holt has recently reviewed the actual success rates of some of these technologies in CANDES. It was proposed that individual members would initiate literature searches on specific ART areas as follows:

Damien: semen collection, semen and testicular/epididymal tissue cryopreservation and AI

Rebecca: oocyte collection, IVM and IVC

Phil: cloning, IVF and ET?

Monique: superovulation, oocyte & embryo cryopreservation, and xenotransplantation.

The inclusion of endocrinology was discussed and it was decided that inclusion would make it too vague. The aim is for each member to establish an abstract database and compile a list of species in which each technology has been successful, prior to the working meeting in South Africa. At that meeting, individual lists based on bibliographies will be integrated into one list during the working meeting in SA. Further work on this objective will be to assess the relative success rates of each technology for a

given species as well as develop an integrated abstract/reference database that would be searchable by users of the CANDES website.

## **Technology Subcommittee**

The goals and focus of the committee were reiterated. The committee has compiled a list of established ART suppliers whose equipment has been adapted and/or used in CANDES species. This list is on the website. Some updates and further companies are needed and members were urged to forward these details to Damien Paris. Also the cloning statement is now on the website. A priority list of novel technologies for development has been put together. More suggestions are needed to expand and define it. This list is also on the website. It was thought that the generation of the ART technology list/database of current successes proposed above may complement this novel technology priority list and provide further guidance as to areas of deficiency. It may also highlight some of the work that is currently underway to address these priorities in CANDES. Other areas in which the Technology Subcommittee could focus was highlighted by Damien Paris that included the development of an information network containing:

- Database of experts in technology (e.g. researchers, diagnostic labs, suppliers of ART equipment)
- Database of experts in taxa reproduction (e.g. researchers, breeders, zoos) – possible overlap with AZA Repro SAG
- Database of unique CANDES biophenomena (e.g. embryonic diapause, sperm pairing, prolonged sperm storage)

In light of previous comments by Reuben Mapletoft to focus on achievable goals, it was considered appropriate to focus effort on the generation of the ART technology list/database of current successes in domestic and CANDES species in conjunction with the Research Subcommittee.

At the end of the subcommittee reports, we discussed the need to bring members into the subcommittee work. We would like members to get more involved as currently the bulk of the workload falls on the chairs. The time of the working meetings at IETS was discussed as a possible deterrent, in that many members may not come early to IETS. We would like to be more visible within IETS, and have the working meeting scheduled after the official start of the actual IETS conference to boost attendance and participation. It was suggested that in Kyoto, we try to get a wildlife session on the program. Reuben will find out who is chair of the program. In addition, the idea of a pre/post conference symposium during the IETS conference in Orlando was discussed.

Meeting Adjourned.

## **APPENDIX 1: List of Attendees**

| <i><u>Name</u></i> | <i><u>Institute</u></i>      | <i><u>E-mail</u></i>   |
|--------------------|------------------------------|--|
| Philip Damiani     | Genetics Savings and Clone   | <a href="mailto:p.damiani@savingsandclone.com">p.damiani@savingsandclone.com</a> |
| Morne De La Rey    | Embryo Plus, South Africa    | <a href="mailto:morne@embryoplus.com">morne@embryoplus.com</a>                   |
| Rose Elliott*      | Institute of Zoology, London |  |
| Bill Holt          | Institute of Zoology, London | <a href="mailto:bill.holt@ioz.ac.uk">bill.holt@ioz.ac.uk</a>                     |
| Rebecca Krisher    | Purdue University            | <a href="mailto:rkrisher@purdue.edu">rkrisher@purdue.edu</a>                     |
| Reuben Mapletoft   | University of Saskatchewan   | <a href="mailto:reuben.mapletoft@usask.ca">reuben.mapletoft@usask.ca</a>         |
| Damien Paris       | University of Glasgow        | <a href="mailto:D.Paris@bio.gla.ac.uk">D.Paris@bio.gla.ac.uk</a>                 |
| Monique Paris      | University of Glasgow        | <a href="mailto:m_wolvekamp@hotmail.com">m_wolvekamp@hotmail.com</a>             |

\* not current member of any CANDES committee (guest of Bill Holt)