

ISIS / ZIMS / IADISC — Special Feature

Sally Walker

In past issues of ZOOS' PRINT Magazine, we have run snippets of articles and information about the incredible change going on in the professional zoological information network. We have never really presented the "big picture" and may not be able to do so now, as it is not only big but complicated as well. But we will try in a short and simple way!

Most of our readers know what ISIS is, of course, the International Species Information System ... cleverly named such that the acronym is the name of the mythological fertility goddess Isis. And, of course, ISIS is all about fertility — captive wild animal fertility in aid of (perhaps, someday, wild wild animal fertility and species survival.

ISIS is about "information" also — current information about where captive animals came from (what source), where they are currently, what potential mates are available to it for breeding, etc. and to make that information available to every zoo in the world.

The big picture of ISIS was to provide a means for all captive wild animals to be part of a world wide breeding pool, so that no animal which might contribute genetically to a conservation breeding programme would be isolated or wasted. Zoos had realised that it was morally and ethically wrong to keep single or otherwise non-breeding or wrongfully breeding animals in the face of declining populations in the wild. Zoos had begun to understand their potential in the growing conservation movement.

ISIS is currently undergoing a complete transformation in keeping with the needs of the current conservation scenario. New services are under planning which represent a quantum leap from ISIS old and ISIS new, including new names for everything.

ISIS in India and South Asia

A bit of history may help in understanding the significance of the present.

Most of our readers might have heard of the Late Dr. Ulie Seal, formerly Chairman of the IUCN SSC Conservation Breeding Specialist Group, but they may not know that Ulie Seal actually developed the International Species Information System or ISIS. Dr. Seal was helping the American Zoo Association work out their tiger genetics in order to create a viable breeding strategy for the whole country's holdings of Siberian tigers. Seal found, not only in relation to the tiger project, but also in relation to other scientific research targeting wildlife, that the zoos of USA didn't have the kind of records required for such research. ISIS grew out of Seal's frustration and his determination to bring good science into zoo and wildlife conservation.

I was fortunate enough to meet Dr. Seal at the ISIS office in 1982 or 83. We had heard of one another and both wanted to talk at the same time. Dr. Seal had been to India to teach immobilisation techniques twice. Nate Fleisness, who later became Director of ISIS was there, and Tom Foose, who is now Programme Director of the International Rhino Foundation were also there. I had been running a small

NGO called the Friends of Mysore Zoo and had learned of ISIS through some of the books and periodicals in the Mysore Zoo Library. I visited Minneapolis specifically to see the ISIS office and try to interest them in helping Indian zoos become members of ISIS. At that time I was more interested in ISIS not merely as a good records system but also as a potential source for finding out which zoos might want to exchange animals with India.

On meeting and discussing Indian zoos and their needs and problems with Dr. Seal and Nate Fleisness, it became clear that one big obstacle to Indian zoos becoming members was finance. There was no central coordinating body then and no mechanism for a zoo to take a decision to spend what was then a rather large amount of money to belong to an "international" records system. On that visit and in later years, it was decided at different times to gift India trial memberships to ISIS and over time, more than 35 mostly Indian zoos had the ISIS "pack" and ISIS membership.

Since it was at my urging that these grants of membership were given, I took responsibility for "tracking" members and their use of the software.

We then realised that there were other obstacles to membership in ISIS than money. Only a scant handful of the zoos sent in data ... of the 35 odd members perhaps 5-7 zoos sent in data — once! — and that was it. For ISIS to work as it should, all zoos should update their data at least bi-annually.

This occurred whether ISIS data was to be recorded on complicated forms for entry into mainframe computers at the ISIS office or on the relatively simple and user friendly computer software of later years or even now on ISIS Windows software. In the first years, when I visited zoos, it turned out that the agency in India responsible for distribution of the boxes containing ISIS material, did not take sufficient interest and had sent incomplete sets. In other instances some zoos had two copies of one crucial manual and no copy of another. Also, since several staff might have tried to figure out what to do or to read the manuals out of interest, the material was scattered. The paper forms were hard to fill out and it took a real effort to try and understand it when a zoo director or curator just received a box of books, forms and instructions. I began going around demonstrating how to fill the forms and explaining the potential use of the books in finding mates for single animals. At that time zoos had more exotic animals than now, and even for some of their native animals, foreign zoos had surplus that they might be willing to exchange.

Also, there were institutional problems later with the computer version of ISIS. Instead of a Curator or Animal Registrar or even a bright head keeper being responsible for ISIS entries, in India — if there was a computer at all, it had to be operated by a "computer operator". This is an administrative convention having to do with the system left behind by the British. The computer operator was so often

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on leave when I visited these zoos that I wondered if all of them were getting some rare disease from the computer itself. Many "tracking trips" were in vain.

By this time Nate and Dr. George Rabb, who was Chair of the Steering Committee, were not happy with me because I had generated interest in ISIS that did not result in productive memberships but cost ISIS a lot of money. They took me aside at a meeting and explained the difficulties this caused them with the ISIS Board. I could understand so I backed for awhile !

When Central Zoo Authority was started I decided to try again. I thought if CZA were to endorse this system and bought into it, the zoos would have to comply with the requirements. CZA would also find the system useful as data can be used in a variety of ways to fulfill their reporting needs and also so that CZA could be proactive in linking up animal exchanges. However when I took ARKS (ISIS's Animal Record Keeping System) and SPARKs (ISIS's Studbook management programme) and demonstrated it to a very senior person in the Ministry who was a member, his response was "yes, that's very good but we will develop one of our own" ! The whole impact of an international system failed to impress.

From time to time this has come up when Member Secretary met ISIS staff at CBSG and WAZA meetings and a plan was made for some zoos to give it a trial under CZA stewardship but it has not materialised.

Today, two major zoos in other South Asian countries are using ISIS software and services, the Central Zoo in Nepal and the National Zoological Gardens in Sri Lanka. They are paying membership on their own and regularly send in data. If two zoos can do it in our region, why not all zoos ? It turns out that India is not the only country (by far !) that has had trouble getting into the groove with ISIS. ISIS found that keeping up with the new conservation sciences and their demands for zoos was very difficult and also that serving everyone's needs — including that of countries with different administrative systems and capacity in their institutions —

required a far greater level of cooperation and commitment than ever before. ISIS and the World Association of Zoos and Aquariums rose to the challenge along with hundreds of individuals and many dozens of institutions to create the best records system "plus" in the world.

Now ISIS is transforming into something incredible ... unbelievable. Even before now, its potential to help zoos and conservation was enormous. Now, no zoo in any country can afford to ignore the benefits which can accrue to species coordination, zoo animal medicine, national-, regional-, international- cooperation and all levels of staff professional development. It is doing so only with all kinds of help and input from around the world.

It is time for Indian and other South Asian zoos to really join the international zoo community. This means more than attending a meeting once a year, whether it be WAZA or SAZARC. SAZARC as a regional association and Zoo Outreach Organisation as an affiliate member of the World Zoo Association and host of SAZARC is going for it and I hope Central Zoo Authority with its 180 zoos should do so as well.

In my "tenure" in Indian zoos, which covers almost 25 years, and in South Asian zoos, which covers over five years, all I have wished and worked for is cooperation between zoos — in countries, between countries of the region and between South Asia and other regions. Today, with the internet and with cooperation and partnership being major values of the international zoo community, it is so much easier for individuals, institutions and associations to communicate and cooperate than when I began. Central Zoo Authority has brought about some cooperation between Indian zoos. SAZARC has brought about much good will and some sharing of information and expertise between the South Asian zoo personnel and can create a real bridge between the zoos of this region and the zoos of the world. The new ISIS combined with the new World Zoo and Aquarium Conservation Strategy will only serve this end in an exponentially better way.

Collaborative processes to achieve better information for conservation and management (The Secret History of ZIMS)

Bob Lacy *

The article below was generated from a Power Point presentation by Dr. Bob Lacy who is a Conservation Biologist with Brookfield Zoo & Chairman of the IUCN/SSC Conservation Breeding Specialist Group. He has been very close to Dr. U.S. Seal in his career and to ISIS and its staff. Bob was one of the first to see that ISIS needed review and rebirth and his work going around to zoos, interviewing people and reporting back, and - most of all - applying his thinking cap to his considerable brain - resulted in much of the action which has brought about the evolution of ZIMS and its various sister concerns. The presentation was given at the SAZARC meeting held in Lahore, Pakistan in 2005 where Bob was a primary resource person for Zoo Population Management.

We need good data on our animals. It's our inventory, and it's a valuable one. Good data, captured in animal records affects many aspects of zoo management, such as :

- Management of animal health and welfare
- Breeding recommendations
- Transfer recommendations
- Documentation (legal, ethical, scientific)
- Long-range planning
- Advancing the profession of animal care, exhibition, and conservation

"Good data" could be defined as data that is complete, accurate, shared, accessible, useable, documented, safe, and used. Maintaining this "good data" requires that those responsible for and who "own" the data are actively involved in decisions about it. "We" (meaning those of us fortunate enough to be professionally involved with the zoo community in its myriad roles) have made significant personal and

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