Why should animal managers become involved in the ZIMS Project?

More User-friendly software
Today's technology provides many opportunities for more efficient and cost-effective and user-friendly data collection, storage and analysis. ZIMS will be built on web technology. Navigating through an animal records system should be as easy as surfing the WEB! In addition, the database and application will support the development of new data collection techniques. For example, easy to use handheld devices, such as PDA's (PalmPilots and PocketPC's) could collect and transfer data from field to desktop and reduce the time spent transcribing and distributing reports.

User-Driven database development
The whole effort began as a user-driven initiative to improve animal information systems for long-term population management AND day-to-day operations. .Much of the ZIMS Project is about gathering requirements for a new system and defining standards for data management from Subject Matter Experts across many disciplines. To accomplish this, a network of focus groups will be organized to gather specific data needs, create common vocabularies and design a system that makes a data management system a knowledge management system.

One, integrated, secure system.
The new system will be built on one integrated structure so that users can navigate to different modules (veterinary, inventory, daily reports, environmental monitoring) from a single application. End-users will be able to set up their preferences for which modules they access most frequently. At the same time, the new system will have better security features built in to control who is granted access to appropriate data.

Preserving historical data
Institutions have been collecting animal data for many years. One of the goals of the ZIMS project is to review the quality and content of existing databases and optimize the historical value by converting it to a new system that can support additional attributes and relationships. For example, it currently is not possible to correlate environmental parameters with animal events without significant efforts in data manipulation. In the new system, a relationship between animal events and environmental events will exist.

Software that meets institutional as well as global needs.
The architecture of ZIMS will be structured to allow institutions to build customized add-ons. The core, centralized database will provide the foundation for institutions to create add-on, specialized applications to enhance productivity at their particular zoo or aquarium. The development of standards for both data and software will mean better use of everyone's resources and greater opportunities to share technology across institutions.

Animal managers shouldn't have to be software experts
Any more than IT professionals are animal managers. The ZIMS Project will engage additional IT expertise and support so that animal professionals can spend time doing what they do best – care for animals, while software installation and maintenance is provided by IT professionals. Another advantage of web technology is the ability to provide remote, round-the-clock, technical support.

Aquatic animals are different from land animals
From a data perspective, the husbandry and care of aquatic animals generates a whole new set of environmental variables and taxonomic challenges. Current software was not designed to handle this data and cannot be easily retrofitted. The ZIMS Project aims to correct this deficiency both in better understanding the processes and data requirements for managing aquatic species.

Pre-birth events are as important as post-birth events.
It is difficult to currently track the events that shape an individual before it's date of birth or if birth never occurs. For example, information currently stored in egg logs should be related and part of the ongoing life history of an individual.

Data is more than text.
Images, video, sound files and other non-textual data files are now used to diagnose, analyze, and inform animal managers about the status of animals in their care. Veterinarians should be able to pull up images associated with medical records and curators view identifying images. The management of multimedia data is an important consideration in building the next generation of software.

The same data should not be entered over and over and over.
There is huge value in having studbook keepers champion the quality of a species records at the population or species level. Valuable time is now spent by studbook keepers re-entering data already sitting in a central database. Why store the same data in multiple places? This only increases the likelihood of discrepancies and inconsistencies and wastes valuable staff time. We need one 'warehouse' of data that can support multiple uses and allow data to be tagged with source information for verification.

There is Green Value in better digital management of information.
The Green value should not be underestimated – digital versions of daily observations could eventually replace paper. Curators and keepers will no longer need to keep stacks of daily reports and logbooks. We can move towards the paperless office.