

# Species360 Update

**72ND WAZA CONFERENCE  
OCTOBER 2017**

*Thanks to our members, Species360 provides the world's most current, comprehensive, and reliable source of knowledge on intensively managed species.*



Global information  
serving conservation.

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## To Our Members

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### Thank you

Thanks to our members, Species360 provides the world's most current, comprehensive, and reliable source of knowledge on intensively managed species. We serve institutional, regional and global animal management (ex-situ and in-situ) and conservation goals.



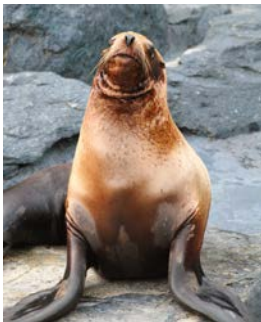
### Looking back

Throughout our 44 years as a non-profit organization, Species360 has helped our zoo and aquarium members increase their understanding of animal care through information sharing and collaboration. As the database grows, so does its value as a source of best-practices and globally aggregated information.



### Where we are now

Species360 now has over 1079 institutional, education, and regional association members from 93 countries, including 390 in just over four years, with an annual member retention rate of 98+ percent. Twenty-one thousand individual users now rely on ZIMS as their animal records management solution.



Your Species360 Board of Trustees is comprised of more than 20 zoo and aquarium volunteer representatives from our worldwide member institutions, including association trustees from WAZA, AZA, EAZA, ZAA (Australasia), CZA, JAZA, and PAAZA. Institutional trustees also represent SEAZA and AZCARM.

### Looking ahead

In 2018, we are looking to broaden the capacity of our science team, allowing them to leverage data to continue informing and serving conservation.

Jim Guenter, CEO  
Species360

## New and Improving ZIMS Products

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Species360's core application, **ZIMS** (Zoological Information Management System), includes **ZIMS for Husbandry**, **ZIMS for Medical**, and as of early 2017, **ZIMS for Studbooks**.

Husbandry and Medical also includes functionality specifically created for aquarium-related needs, which we call "**ZIMS for Aquatics**."

### **ZIMS for Studbooks**

Almost 120 studbooks are already using ZIMS for Studbooks, globally, including all studbooks managed by PAAZA and over 50 in EAZA. As these numbers grow monthly, we are ready and eager to accelerate migrations. Data sharing and collaboration continues to grow across associations as several non-Species360 members are already using ZIMS for Studbooks. We are excited about the dramatic efficiency and data quality improvements that are possible because of the tight integration with institutional records, all but eliminating the need for manually entered taxon reports for member data.

### **ZIMS for Aquatics**

In 2017 and into 2018 we are rapidly developing improvements for all of our core applications. ZIMS for Aquatics is rapidly improving the system in areas like Group Management, Water Quality Tracking and Trends, Daily Logs and Enrichment.

### **ZIMS for Medical**

In ZIMS for Medical, zoo and aquarium users can look for improvements in Clinical Notes, Enclosure Prescriptions and Treatments, Samples, Test Results, Necropsies and Pathology. They can already take advantage of our unique global resources such as Expected Test Results, Common Clinical Issues, Global Drug Extracts, and Anesthesia Protocols. If you have not discovered these global resources, we highly encourage you to explore the tools and features built to support the medical management of your collection.

### **Mobile**

We are also leveraging new technology. This will take some time (ZIMS is a big application!), but as new capabilities are developed many will be more mobile ready, allowing users with a Wi-Fi or mobile connection to take ZIMS with them on a tablet or phone.

### Languages

ZIMS is currently available in **English**, **Spanish**, and **Russian**. We are excited to expand our partnership and collaboration with JAZA. Working together with JAZA and 14 volunteer Japanese translators, ZIMS in **Japanese** is expected to be available at the end of the year.

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JAPANESE  
ASSOCIATION OF  
ZOOS AND  
AQUARIUMS

## Community funded enhancements

The vast majority of Species360 revenue is from membership fees. The fees are used to fund the ongoing development, maintenance and support of ZIMS, in response to member needs and requests. To increase our ability to deliver new solutions we are running two concurrent crowd-funding campaigns. *Thanks to the generosity of the members funding these campaigns, these solutions will be available at no cost for ALL Species360 members.*

### Animal care enhancements

This \$84,000 investment is expanding solutions available to our community in support of animal care, behavioral, environmental, and medical data for the species in our member institutions. In 2016, Woodland Park Zoo initiated discussions with Species360 to develop an exciting new Animal Care Monitoring Tool within ZIMS. This tool will provide a dashboard of animal care indicators, such as body condition score, activity level, behavior, space use, diet consumption, health status, etc. It is primarily designed for keepers and animal care staff, curators and registrars. Seamless integration with ZIMS will enable the data to be portable across applications in real-time, making it easier to compile and view animal care information within your institution and across institutions.

We are excited to announce that this campaign is now 100% funded thanks to generosity from *Woodland Park Zoo, Disney, Calgary, Wuppertal, Cameron Park, Cali, B Bryan Preserve, Taronga, Moscow, Hai Park Kiryat Motzkin, Nikolaev, Caldwell, Kiev, Dickerson Park, Kaliningrad, Columbus Zoo & Aquarium, Point Defiance Zoo & Aquarium, Los Angeles Zoo, North Carolina Zoo, Birmingham Zoo, and WAZA.*

### Importing clinical lab results

This \$64,000 investment will provide a direct import feature for lab results to decrease manual data entry and data quality issues while strengthening evidence-based decision making and improving care. The elapsed time from lab result to treatment will decrease and data entry errors will be significantly reduced. Vet staff time can be redirected to more critical functions. There is also a broad welfare and conservation benefit for all zoos from increased input of lab results and the generation of new reference ranges for species on which such information is

currently unavailable. *This campaign is being funded thanks to the generosity of Species360 members in ZAA (Zoological and Aquarium Association).*

### Premium services

Species360 also regularly develops new capabilities with individual institutions. Those solutions can be unique to that institution or of benefit to all members. We call this our Premium Services. Please let us know if you have questions or are interested in sponsoring these or other initiatives.



*Every day more than 1070 members all over the world generate streams of data into Species360 ZIMS in real-time, yielding important new insights on best practice animal care.*



## Conservation science

In October 2016, Professor Dalia A. Conde, Ph.D. joined Species360 as our Director of Science. At the end of her first year on the team, we have made significant progress leveraging the power of ZIMS data for conservation science and research. Our goal since day one is to develop strategic research that explores and demonstrates the value of our member's data.

### Value of ZIMS data

With the goal of demonstrating the value of ZIMS to fill critical knowledge gaps, the Species360 team integrated and standardized 22 conservation and species data sources to design the first index of species knowledge. They found that Species360 member data, captured in ZIMS, increases the known demographic data on Birds, Mammals, Amphibians and Reptiles by as much as **tenfold**. We are looking forward to sharing more about this amazing wealth of data soon.

### Transforming data into conservation action

We have launched a new initiative: **transforming data into conservation action**. The goal is to use Species360 members' data to help to stop the trade of species laundered as "captive bred" in the international markets. Our first project focuses on turtles and tortoises. Following in the footsteps of, and partially funded by, Wildlife Reserves Singapore (WRS), we are using ZIMS data to understand captive breeding constraints and costs for these species.

Furthermore, to identify which are the critical regions where a legislative change can have a significant impact, we explored the market flows since 1990 to 2015, by integrating ZIMS data with the CITES Trade Databases. In collaboration with TRAFFIC South East Asia, Chris Shepherd, and Wild Life Reserves of Singapore we believe this project can have a high impact on changing the legislation of targeted species.

We are developing new tools and techniques for cleaning and extracting ZIMS data. These tools provide simplified access to invaluable data and will be available to members to support important, external research projects vetted by our member-led Science Committee, and approved by our Board of Trustees. The initial phases of this work are sponsored by Max Planck, MaxO Center, The University of Southern Denmark, the French National Center for Scientific Research (CNSR) and the University of Michigan.



## Preventing aquatic species extinction

Another project initiated by our team is titled, “Preventing extinctions at higher depths, aquatic species in ZIMS and the importance of a standardized global record keeping” is in progress. We are optimistic this will demonstrate a new or improved value proposition. Leveraging ZIMS data better serve existing and potential aquarium members. Data available in ZIMS is ready to support conservation and welfare initiatives requiring data on many aquatic species. As we continue to add aquarium members, the impact of this data will only grow.

## The year ahead

In 2018, we are looking to broaden the capacity of Dalia and her team, allowing them to leverage data to continue informing and serving conservation, medical and other science disciplines. As always, we are especially excited when we can support members as they make a global impact in these areas, globally. We are actively looking for Grants, sponsors and partners for this work. If you are interested in exploring partnership opportunities, please let us know.



## In closing

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As 2017 draws to a close, Species360 once again extends our thanks to the global zoological community for supporting animal welfare and conservation. Your financial contributions keep us financially sound and your data contributions allow us to provide invaluable data sharing and collaboration in addition to global reference data. You have provided information on 7 million animals and 22,000 species plus aggregate knowledge accumulated from 50 million individual medical records and over 145 million individual husbandry records. What an amazing treasure of information!

### To learn more:

**Visit:** [www.Species360.org](http://www.Species360.org)  
**Watch our video:** [bit.ly/animal-datascience](http://bit.ly/animal-datascience)  
**Read our blog:** [www.species360.org/about-us/blog-newsletters](http://www.species360.org/about-us/blog-newsletters)

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