

Case Study

Technology GAINS for Human, Animal and Wildlife Health

One of the key programs of the Wildlife Conservation Society (WCS), a non-profit group dedicated to conservation, is its Global Health Program. Since 2006, as part of the Global Health Program's One World One Health Initiative, WCS has been running GAINS, the wild bird Global Avian Influenza Network for Surveillance. Through capacity building, appropriate technology and interagency networking, WCS has engaged a coalition of public and private sector partners to build the world's most advanced, online, public database on avian influenza in wildlife.

The success of GAINS has led WCS to move forward with plans to extend the project to become the Global Animal Information Network for Surveillance, which would focus on a range of emerging disease and wildlife species. Much of the work has already been completed through the development of the underlying software architecture called WISDOM, the Wildlife Information System for Disease Observation and Monitoring.

Jonathan Palmer, WCS' Global Director for ICT and the Chief Architect for WISDOM and GAINS Technology, says: "The GAINS site, www.gains.org, was launched within a month of the start of the GAINS project. Through an agile approach we have iteratively improved the solution over the last two years, leveraging cutting edge expertise by outsourcing to niche teams around the globe. The ongoing support of a number of major IT corporations has been the foundation of our success."

WCS' One World One Health™ program is predicated on the interdependence of human, wildlife and animal health. This has been borne out by the GAINS initiative, with much of the interest in the project coming from the human and livestock health sectors.

The project has provided conservation professionals shared access to a global database on avian influenza in wild birds, including background sampling, population census, and ecological data.

Dr. William Karesh, head of WCS's Global Health Program, says "Disease monitoring data, supported by accessible technology, are one of the first rungs on the ladder when it comes to addressing the challenges of zoonotic diseases. GAINS has done much to build a global network but we are still many years from achieving the level of functional integration needed between the wildlife health, livestock health, and public health sectors to address these issues. It is urgent that we identify a sustainable strategy FOR bringing these sectors together to focus on building capacity in the broadest sense – from data management through to emergency response. WCS is committed to deliver on its responsibility to the global community to respond appropriately to zoonotic diseases; agencies like NetHope and the private sector can make sure others meet the responsibility of playing their part."

The Wildlife Conservation Society saves wildlife and wild lands. They do so through careful science, international conservation, education, and the management of the world's largest system of urban wildlife parks, led by the flagship Bronx Zoo. Together, these activities change individual attitudes toward nature and help people imagine wildlife and humans living in sustainable interaction on both a local and a global scale. WCS is committed to this work because they believe it to be essential to the integrity of life on Earth.

NetHope is a new generation information and communications technology collaboration of 24 leading international non-governmental organizations representing over \$30B of emergency relief, human development and conservation programs in 180 countries serving millions. This update highlights the impact of NetHope's focus on making the billions of dollars of revenue received by its member agencies go further through the effective and efficient use of technology.

For More Information:

[The Wildlife Conservation Society](http://TheWildlifeConservationSociety.org)

WCS.org

GAINS.org

[NetHope](http://NetHope.org)

NetHope.org

Synopsis:

- Poor proliferation of expertise and knowledge have allowed animal borne diseases such as the Avian Flu and SARS to negatively impact human health and livelihoods, livestock and wildlife.
- Skills and knowledge to improve the management of disease risks of human-animal interaction are being distributed using capacity building, interagency networking and innovative technology.
- To help prevent and reduce the negative impact of zoonotic diseases on human livelihoods, livestock and wildlife, while building new constituencies for environmental conservation.