

# EXHIBIT 30



EcoHealth  
Alliance

FISCAL YEAR  
**2012**  
ANNUAL  
REPORT

# ABOUT ECOHEALTH ALLIANCE

## BUILDING ON OVER 40 YEARS

of groundbreaking science, EcoHealth Alliance is a global, nonprofit organization dedicated to protecting wildlife and safeguarding human health from the emergence of disease. The organization develops ways to combat the effects of damaged ecosystems on human and wildlife health. Using environmental and health data covering the past 60 years, EcoHealth Alliance scientists created the first-ever, global disease hotspots map that identified at-risk regions, to help predict and prevent the next pandemic crisis. That work is the foundation of EcoHealth Alliance's rigorous, science-based approach, focused at the intersection of the environment, health, and capacity building. Working in the U.S. and more than 20 countries worldwide, EcoHealth Alliance's strength is founded on innovations in research, training, global partnerships, and policy initiatives.

## Two statements guide all aspects of our work.

EcoHealth Alliance's **VISION** is to be the organization leading the change in perspectives, policy, and practices that increase global capacity to respond to emerging threats at the intersection of health and the environment. Our **MISSION** is to integrate innovative science-based solutions and partnerships that increase capacity to achieve two interrelated goals: *protecting global health* by preventing the outbreak of emerging diseases and *safeguarding ecosystems* by *promoting conservation*.

Our research and programs continue to be featured in prestigious **peer-reviewed journals** such as *Nature*, *Science*, *PLoS One*, *The Lancet*, and Institute of Medicine reports. EcoHealth Alliance regularly garners **top media placements** in such outlets as *The Wall Street Journal*, *The New York Times*, *Huffington Post*, and *TIME*.



Bats are known to be the reservoir for many zoonotic viruses including rabies, Ebola, Marburg, Hendra, Nipah, and SARS. EcoHealth Alliance is working to predict and prevent emerging diseases by actively testing wildlife in critical hotspots around the world.

On the cover: Of the four Great Apes, orangutans are found in Indonesia and Malaysia and are the largest tree living mammals in the world, making their homes in the forest treetops, where they live, eat, and sleep as much as 100 feet above the ground. EcoHealth Alliance and its partners are developing new solutions to help save and protect this species through Project Deep Forest in Borneo.

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EcoHealth Alliance's Board of Directors set the strategic direction, ensure the financial health and sustainability of the organization, and hire and evaluate the performance of the president. EcoHealth Alliance's Board of Directors provide specific expertise relevant to their personal and professional backgrounds to help the organization enhance its ability to conduct research, advance science, and protect human, animal and ecosystem health.



EcoHealth Alliance's wildlife sampling and pathogen discovery in Bangladesh is supported by local conservation partnerships and has saved countless lives from the emergence of disease such as Nipah virus. Local community engagement and in-country capacity building is a vital component of EcoHealth Alliance's work in all field sites.

# LETTER FROM THE CHAIRMAN

June 30, 2012

Dear Friends,

EcoHealth Alliance's work centers on the disease threats both to humans and to wildlife that arise when humans disturb the natural environment. We focus particularly on the connection between *local conservation* and *global health*.

EcoHealth Alliance scientists and others have shown that over 60 percent of pathogens that infect humans originate from animals, the majority from wildlife. The list of deadly or debilitating diseases that have originated from wildlife in recent years includes SARS, HIV, Nipah virus, Lyme disease, Rocky Mountain Spotted Fever, and West Nile virus. Moreover, we are seeing more and more of these emerging infectious diseases arise as time goes on.

The same things that bring about emerging infectious diseases also cause environmental destruction which in turn results in loss of biodiversity, especially for mammals, birds and amphibians. Anthropogenic "drivers" of emerging infectious diseases include deforestation, agricultural expansion, natural resource exploitation, bushmeat hunting, and global travel.

These causal factors create prime opportunities for health and professionals and ecologists and other environmental

EcoHealth Alliance and its global partners continue to research the emergence and spread of chytridiomycosis — this relatively newly discovered fungal disease continues to be associated with amphibian mass mortality rates and population declines globally.



scientists in academia, government and the NGO community to collaborate. EcoHealth Alliance is at the forefront of the effort to initiate these collaborations, and to improve the way in which we address emerging infectious diseases.

In fiscal 2012, the Hollywood film *Contagion* portrayed a world facing the type of pandemic that EcoHealth Alliance is working to prevent. The fictitious virus in the film was modeled after the real-life Nipah virus, which first swept through Malaysia's pig farms in 1998. Bats, which perform vital ecosystem functions as pollinators and seed dispersal agents, infected pigs. Farmers got sick, and millions of swine were slaughtered to thwart the disease. EcoHealth Alliance scientists were called to examine the site of the first Nipah virus infection and were able to piece together the complex puzzle that caused the outbreak. Our research showed how the Nipah virus spillover originated with human-induced changes to the natural environment.

In Southern Asia we are catalyzing the "OneHealth" movement, which recognizes that human, animal and ecosystem health are inextricably linked and that expertise from several disciplines is required to address threats to them. Our Project Deep Forest begun this year will examine the effects of deforestation on the potential for new emerging infectious diseases. In a similar vein, our role in USAID's PREDICT project is to identify new emerging infectious diseases that could threaten human health while our SICKI Project is aimed at modeling their dynamics behind disease emergence. Finally, our PetWatch program seeks to reduce the illegal wildlife trade that threatens to export disease, introduce invasive species, and contribute to extirpations in the wild.

The pages that follow will describe EcoHealth Alliance and our programs in more detail. I hope they will capture your interest. EcoHealth Alliance merits your support!

Sincerely,

Robert L. Hoguet  
Chairman, EcoHealth Alliance



# LETTER FROM THE PRESIDENT

June 30, 2012

Dear Friends,

As we close our fiscal year, I enjoy taking this moment in time to look back and see how we've progressed as an organization, to reflect how our research has influenced policy and to celebrate the success of our programs.

Now in our 41<sup>st</sup> year of operation, EcoHealth Alliance continues to develop innovative science-based solutions to protect wildlife and human health from emerging infectious diseases.

Emerging infectious diseases that seemingly come out of nowhere — *don't just happen* — they are the direct result of what we do to disrupt nature that causes disease outbreaks. Today, with more than 60 percent of emerging infectious diseases coming from animals, EcoHealth Alliance is working on the front lines of disease outbreaks as well as behind the scenes to forecast the next possible pandemic.

Our groundbreaking research into global emerging disease hotspots remains at the core of our programs. To develop these maps, EcoHealth Alliance scientists analyzed outbreak data for the past 50 years and showed exactly which regions are the most likely to be the source of a new pandemic. By identifying potential infectious disease threats and hotspot regions, we can protect both public and environmental health.

In these hotspots, we have developed our Deep Forest Project based on the assumption that the greater the biodiversity in a given area, the greater diversity of wildlife pathogens. As long as these areas of high biodiversity remain preserved in their natural state and free of human encroachment, then people are less at risk of emerging infectious disease.

EcoHealth Alliance scientists have begun to test this theory in the forests of Manaus, Brazil, and Borneo, Malaysia. In the past year, our scientists have begun sampling species for pathogens in each country along a deforestation gradient, i.e., looking at areas with no deforestation, some deforestation, and areas where once pristine forests have been completely removed.

In each area, EcoHealth Alliance scientists will be investigating the number of viruses present to test the theory that higher biodiversity allows for a greater diversity of pathogens. Project Deep Forest allows us to test our hotspots model, where areas with high biodiversity along with a high human population density are marked as highly likely for disease emergence.

With the hotspots mapping methodology as an ongoing tool, we completed the third year of our five-year involvement with PREDICT, a component of USAID's Early Pandemic Threat (EPT) program. The PREDICT project seeks to identify new emerging infectious diseases that could become a threat to human health. PREDICT partners locate their research in geographic "hotspots" and focus on wildlife that are most likely to carry zoonotic diseases - animals such as bats, rodents, and nonhuman primates. Several bat species are among the animals sampled through PREDICT and illustrate our long-standing involvement in bat conservation and health.

In just 12 short months, our team safely and humanely collected samples for analysis from over 20,000 animals. We looked for new viruses and 200 new viruses have been discovered to date. We are also determining the potential risk and methods of transmission for specific zoonotic diseases — key points for spillover have been identified and global risk maps continue to be refined.

We are proud to present this annual report and to highlight our successful programs. As this moment of reflection wanes I look forward to a new fiscal year with even more success, increased capacity building for our programs and a keen eye on the ecohealth challenges we face ahead.

Thank you,



Dr. Peter Daszak  
*President, EcoHealth Alliance*



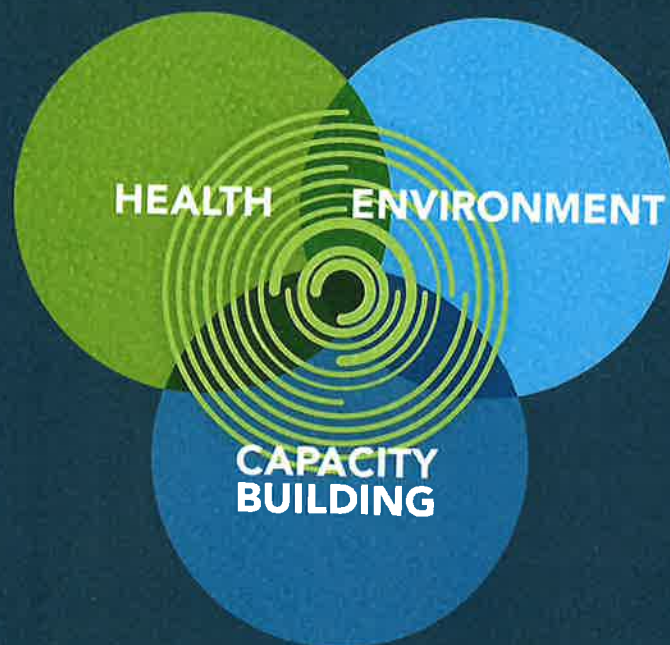
# ORGANIZATION UPDATES

In Fiscal Year 2012, EcoHealth Alliance outlined a **three-year strategic plan** to build on the vision that guides the success and growth of the organization. The strategic plan focuses on the complex and changing threats to the environment, and the impact on human, animal, and ecosystem health. In this plan, growth opportunities are outlined to further explore programmatic enhancements as well as identify strategic partnerships and future research.

While continuing to build on the recent re-branding of the organization, we have set in place sustainable growth paradigms within our programs, staff, budgets and marketing goals. We continue to position EcoHealth Alliance as a leading organization at the intersection of wildlife conservation, environmental and public health.

EcoHealth Alliance scientists continue to make critical scientific breakthroughs to show how the biggest threats to global health are caused by environmental changes that alter and destroy wildlife habitats. These changes include deforestation, climate change, the wildlife trade and a host of other environmental issues. EcoHealth Alliance will continue to use its scientific expertise to understand these issues and develop science-based solutions to these threats.

Through our dynamic leadership and multi-disciplinary science teams, EcoHealth Alliance continues to create innovative solutions to the most pressing environmental and public health issues facing us today.



**EcoHealth Alliance works at the intersection of ecosystem, animal and human health through local conservation programs and develops global health solutions to emerging diseases.**

# PROGRAM UPDATES

EcoHealth Alliance's programs continue to change the face of ecohealth practices by integrating multi-disciplinary teams as well as both domestic and foreign government agencies. This collaborative approach is cost-effective, culturally sensitive and gains buy-in from all participants.

## PREDICT

Avian Influenza, HIV/AIDS, SARS, and Influenza H1N1: these diseases are not just infamous for their human and economic impact. They also share one common trait. All four of these diseases are animal-related, and they are not the only ones of their kind.

Zoonotic diseases — or those that can be transmitted between animals and humans — represent approximately 75 percent of the newly emerging diseases currently affecting people. In the context of globalization and expansive trade and travel, these diseases can travel very quickly, posing serious public health, development and economic concerns.

In an effort to identify and respond to new zoonotic diseases before they spread to humans, the U.S. Agency for International Development (USAID) established its Emerging Pandemic Threats (EPT) program. The EPT program consists of four projects: PREDICT, RESPOND, IDENTIFY, and PREVENT. The PREDICT project seeks to identify new emerging infectious diseases that could become a threat to human health. PREDICT partners locate their research in geographic “hotspots” and focus on wildlife that are most likely to carry zoonotic diseases — animals such as bats, rodents, and non-human primates.

EcoHealth Alliance works at the leading edge of this field by building local capabilities and testing high-risk wildlife in Bangladesh, Brazil, China, Colombia, Indonesia, Malaysia, and Mexico. After scientists collect swabs or small amounts of blood, they analyze the samples in the lab to look for evidence of disease. The findings are catalogued in a database, which mathematical experts use to create predictive

EcoHealth Alliance goes beyond scientific fieldwork to support local researchers and actively build local capacity. As a PREDICT partner, EcoHealth Alliance works with scientists and policymakers in each country to create a network of research, communication, and response partners — on a local, regional, and global level.

maps of potential disease outbreaks. This approach not only allows researchers to find new diseases, but also helps communities prepare for and respond to the threat of an outbreak.

The strongest foundation of EcoHealth Alliance research is the connection between *local conservation* and *global health*. EcoHealth Alliance goes beyond scientific fieldwork to support local researchers and actively build local capacity. As a PREDICT partner, EcoHealth Alliance works with scientists and policymakers in each country to create a network of research, communication, and response partners — on a local, regional, and global level.

### THE EMERGING PANDEMIC THREATS (EPT) PROGRAM IS:

- Detecting and identifying zoonotic pathogens in wildlife — over 20,000 animals have been tested and 200 new viruses have been discovered to date.
- Determining the potential risk and methods of transmission for specific zoonotic diseases — key points for spillover have been identified and global risk maps highly refined.
- Implementing the “one health” approach of cross-discipline research — bringing more stakeholders — including the public — to forge conservation and health solutions.
- Supporting the growth of sustainable, country-level programs and response capabilities.
- Promoting the actions that minimize or eliminate the potential for the emergence and spread of new disease threats.





## PROGRAM UPDATES

# OHASA

(ONE HEALTH ALLIANCE OF SOUTH ASIA)



EcoHealth Alliance has continued to develop a network of scientists and policy-makers with expertise in 'One Health' from partner organizations and governments in South Asia.

The One Health perspective recognizes that the health of humans, animals, and ecosystems are inextricably linked and therefore requires experts from different health-related fields to work together to predict, prevent, and control zoonotic diseases.

The inaugural meeting of the One Health Alliance of South Asia (OHASA) occurred in November 2009 at Chalsa, West Bengal, India with support from the Rockefeller Foundation. At this meeting, government representatives, leaders from the health sector and scientists from Bangladesh and India gathered to discuss the goals and challenges of trans-boundary collaboration in science, surveillance, and policy with respect to zoonotic diseases. This outcome of this meeting was a document called "The Bengal Declaration" — a call to action for ministerial agencies and governments of India and Bangladesh, the international donor community,

national and international non-governmental organization, and human, animal and ecosystem health sciences. The Bengal Declaration lists critical challenges that OHASA will pursue in coming initiatives.

Present at the first inaugural meeting of OHASA were the Hon'ble Minister for Environment and Forests from the Government of India (Shri. Jairam Ramesh), the Secretary of the Ministry of Fisheries and Livestock from the Government of Bangladesh (Mr. Md. Sharful Islam), as well as leaders from academia, conservation and health NGOs, the health sector and wildlife departments from both countries.

In October 2011, the OHASA's Steering Committee and honored guests from human health, wildlife science and veterinary backgrounds representing Pakistan, India and Bangladesh met in Dhaka, Bangladesh at the Institute of Epidemiology Disease Control and Research (IEDCR). The purpose of this meeting was to begin drafting a strategic plan, including a 4-year roadmap, which would be presented at a larger meeting the following summer to a broader OHASA membership in Delhi, India.

In July 2012, OHASA convened a meeting with more than 50 delegates representing human, livestock and wildlife health from Bangladesh, India, Nepal, and Pakistan — including members of ministries, university faculty, and NGOs. At this meeting, the OHASA steering committee led discussions designed to more fully integrate the needs and interests of key stakeholders in the region and worked towards further refining its strategic plan through 2015.

Since then, EcoHealth Alliance has continued to develop a network of scientists and policy-makers with expertise in One Health from partner organizations and governments in South Asia. OHASA, with guidance from its steering committee composed of health experts from Bangladesh, India, Nepal, and Pakistan, has continued to grow in membership and recognition. EcoHealth Alliance and OHASA also continues to reach out to other organizations, including government agencies, to increase inter-governmental and inter-organizational collaboration around the One Health initiative.

## PROGRAM UPDATES

# ASSESSING AND MITIGATING THE IMPACTS OF ILLEGAL WILDLIFE TRADE

Congruent with our mission to protect the health of wildlife and people across the planet, EcoHealth Alliance is working to reduce the negative impacts of illegal wildlife trade. Estimated to be worth 10 billion dollars per year, illicit wildlife trafficking represents one of the leading illegal activities globally. The potential threats to humans and animals are extensive, including the spread of disease, the introduction of invasive species, and the extinction of wildlife populations.

The scale of the legal global wildlife trade is enormous and increasing. While the illegal wildlife trade is of high concern, it is imperative that legal trade is conducted responsibly. The introduction of non-native species around the world, both accidental and intentional, is a significant source of pathogen pollution (defined as the human mediated introduction of a pathogen to a new host or region). The wildlife trade has facilitated the introduction of alien species, where they compete with native species for resources, alter ecosystems, damage infrastructure and destroy crops. It has also led to the introduction of pathogens that threaten public health, agricultural production and biodiversity.



The illegal wildlife trade represents an unregulated market of live wild animals and wild animal products. Products range from expensive artifacts (such as those made from elephant ivory), to food items (such as “bushmeat” or meat of wild mammals such as nonhuman primate) to fashion products (made from fur or skins of rare animals). Illegal products skirt regulations in place to protect conservation of vulnerable species as well as prevention of disease transmission from non-native wildlife to humans, domestic animals (such as pets and livestock) and wildlife native to the United States. Diseases of public health concern that have emerged from the wildlife trade in the past include SARS and monkeypox.

Experts at the EcoHealth Alliance are conducting on the ground science, in collaboration with government and industry, to reduce the risks of wildlife trade.

### ONGOING PROJECTS INCLUDE:

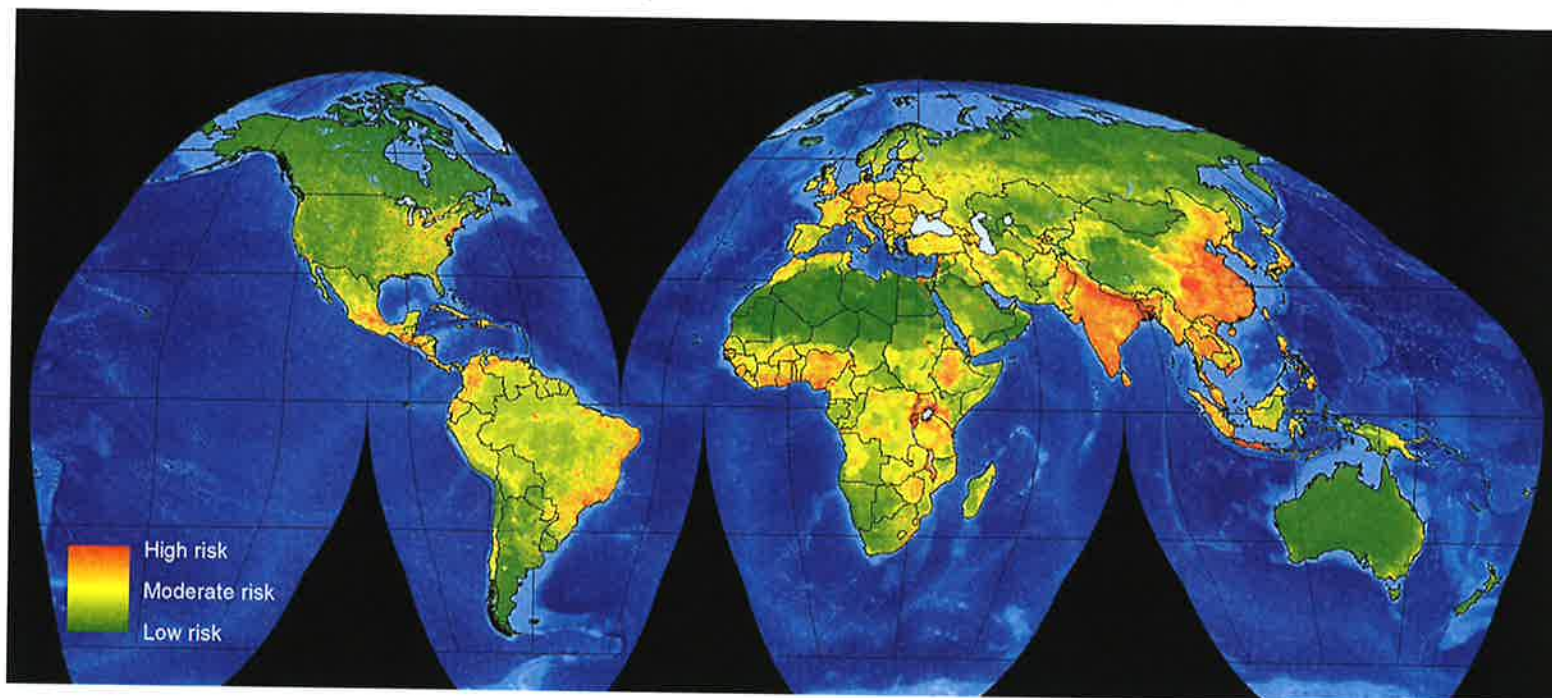
- Conducting disease surveillance of traded wildlife and U.S.-confiscated wildlife imports to inform decision makers about wildlife-associated pathogen risk.
- Studying disease risk at the human-wildlife interface in Asia—a hotspot for emerging zoonoses.
- Developing socio-economic models to identify the most cost-effective means of preventing disease emergence from wildlife importation to the U.S.
- Modeling the spread of pathogens through trade and travel networks to predict emergence, and identifying the socio-economic drivers of pathogen spread through live animal trade networks.
- Informing international trade and animal health groups of necessary measures to strengthen policies on wildlife harvest and movement.
- Assessing non-traditional pet choices to provide scientifically-based recommendations for healthy and environmentally-friendly pets via our PetWatch program ([www.PetWatch.net](http://www.PetWatch.net)).
- Developing outreach materials for travelers, airport staff, and law enforcement officials to increase public awareness of the illegal wildlife trade.

The illegal wildlife trade represents an unregulated market of live wild animals and wild animal products. Products range from raw “bushmeat” (meat of wild mammals such as nonhuman primate) to fashion products (fur or skins).

## PROGRAM UPDATES

THE  
SICKI PROJECT

Our scientists are investigating emerging disease threats to support multiple projects at EcoHealth Alliance, including outbreak investigation, hotspots mapping, and disease surveillance.



The goal of The Sicki Project is to unravel the origins of emerging infectious disease events. The project builds upon previous work at EcoHealth Alliance, such as the hotspots maps published by Jones et al. (2008) in the journal *Nature*. With Sicki, we aim to reduce uncertainty surrounding the origins of emerging infectious diseases and disease outbreaks by curating, reviewing, and expanding the scope of the data used by the global health community to model disease emergence. This initiative will ultimately generate improved inputs for spatial analyses and predictive models of emerging infectious disease risk, such as those used to generate hotspots maps.

Our team has designed an innovative web application to facilitate collaborative literature and peer

review efforts. The Sicki web encyclopedia will host an editable scientific wiki that enables experts and researchers to peer review events and a content repository to host resources (reports, data, maps, and media) related to the events. The website employs collective intelligence mechanisms to improve the accuracy of the data, and features a scalable cloud architecture, dynamic maps, Application Programming Interface (API) for analysts, and an integrated reference management system. The web application is undergoing user testing at EcoHealth Alliance, following which we will be convening a panel of experts to evaluate the content and identify reviewers for the individual emerging infectious disease events and outbreaks.

## PROGRAM UPDATES

# PROJECT DEEP FOREST

Rapid deforestation all over the world is a major cause for concern from a conservation and public health perspective. Several hundred species are a part of the delicate ecosystems created by the richly biodiverse forest environments. Deforestation and human encroachment displaces these species and forces heightened interaction between people and animals indicating a high potential for disease transmission as we have seen from the stories of Nipah Virus, Avian Influenza and SARS emergence.

Following our work on the hotspots map, Project Deep Forest was developed on the assumption that the greater the biodiversity in a given area, the greater the diversity of pathogens. As long as these areas of high biodiversity remain preserved in their natural state and free of human encroachment, then people are less at risk of emerging infectious disease. EcoHealth Alliance scientists have begun to test this theory in

the forests of Manaus, Brazil, and Borneo, Malaysia. In the past year, our scientists have begun sampling species for pathogens in each country along a deforestation gradient, i.e., looking at areas with no deforestation, some deforestation, and areas where once pristine forests have been completely removed.

In each area, EcoHealth Alliance scientists will be investigating the number of viruses present to test the theory that higher biodiversity allows for a greater diversity of pathogens. Project Deep Forest allows us to test our hotspots model, where areas with high biodiversity along with a high human population density are marked as highly likely for disease emergence. UC Davis will be using our innovative methodology, developed for Project Deep Forest, for further pathogen sampling in Uganda.



Deforestation and human encroachment displaces species and forces heightened interaction between people and animals creating a high potential for disease transmission.

## PROGRAM UPDATES

HEALTH AND POLICY  
INITIATIVES

Despite the strong interdependencies of people, animals and the environment, wildlife and ecosystem health are typically not considered in harmony with human health, agriculture, or conservation policies. As a result, these initiatives are missing the critical piece of the health and biodiversity puzzle. Policies often end up lacking in science-driven guidance, and responses are reactive rather than proactive in predicting and preventing health and conservation threats.

EcoHealth Alliance has a core focus of translating its strong ecosystem health science into actionable information for policy makers. Towards this goal, over the past year we have expanded our collaborations with local, national and intergovernmental agencies and organizations. For example, we have strengthened coordination with the Convention on Biological Diversity, publishing a series of papers with partners from the CBD and other international organizations on a way forward for integrating biodiversity and health efforts.

EcoHealth Alliance has continued to provide ecosystem health expertise to intergovernmental organizations including the World Organisation for Animal Health, the International Union for the Conservation of Nature, and the World Health Organization. These and other efforts have allowed us to strengthen synergies among health and conservation efforts and work towards mutual priorities and benefits.

At a national level, we have actively sought to provide science-based guidance to benefit public

EcoHealth Alliance is focused on translating its ecosystem and public health science into actionable information for policy makers that enables the organization to expand intrinsic collaboration with local, national, international governmental agencies and organizations.

health and the environment in the U.S. In addition to organizing and participating in Senate and White House briefings on threats and approaches to promote global and local health, we have provided technical guidance on state and federal regulations, including science-based guidance for strengthening Salmonella prevention from animal sources in childcare centers. We have also been involved in efforts with government partners to develop a coordinated national strategy for wildlife, and have expanded our engagement with the public health community through links with the American Public Health Association.

Recognizing the importance of both regulatory approaches and corporate practices to health and the environment, EcoHealth Alliance strives to also work closely with private industry to develop sustainable and healthy practices. Across the world and on local levels, EcoHealth Alliance staff and partners engage policy makers and industry partners to provide sound guidance based on science and build capacity to more efficiently and effectively promote wildlife and domestic animal health, public health, and natural resource management.



World  
Organisation  
for Animal  
Health



World Health  
Organization



American  
Public Health  
Association



Convention on  
Biological Diversity

## PROGRAM UPDATES



# BAT CONSERVATION AND HEALTH

Bats play a crucial role in ecosystems and are vital to the regeneration of forests through pollination and seed dispersal. Bats also control insect populations worldwide and are currently being threatened globally by habitat destruction and unabated hunting.

Bats are an ecologically vital group of mammals, representing over 20 percent of all mammalian diversity with more than 1,200 species. Fruit-eating bats pollinate our trees and disperse seeds — ensuring the health of more than 50 percent of the old world rainforest, while insect eating bats here in the United States are responsible for controlling agricultural pests as well as mosquitoes. Bats have also been recognized as reservoirs of several important emerging pathogens that impact human and livestock health, such as Nipah virus, SARS, Ebola, and several other viruses. These viruses have emerged largely due to human activities that alter the environment and bring bats, people, and livestock into closer contact. Bats are currently being threatened globally by habitat destruction; unabated hunting; and here in the

United States, by a deadly fungal disease called White Nose Syndrome, which has decimated populations in the eastern United States and Canada and threatens certain species with extinction. We face an important challenge in our efforts to protect these important animals from hunting, habitat loss, and disease, while striving to understand the complex situations that cause bat viruses to spill over into human and animal populations and also protect human and domestic animal health.

For well over a decade, EcoHealth Alliance scientists have dedicated time and resources to studying diseases in bat populations, and simultaneously protecting these gentle creatures from extinction. Since our 2002 investigation into the emergence of Nipah virus, and in 2003 our discovery of a bat origin of SARS ►

## PROGRAM UPDATES

# BAT CONSERVATION AND HEALTH *continued*

coronavirus, we have generated an increasing amount of scientific evidence that these diseases emerge because of human activities such as agricultural expansion and wildlife trade, and that the best way to prevent the emergence of bat-borne pathogens is to improve our understanding of bat ecology and change the way we impact their environment. We have expanded our efforts to study the ecology of bat-borne viruses globally, collaborating with local scientists throughout the world to study viruses that threaten public health and to discover novel viruses that may have the potential to do so, in an effort to predict outbreaks and protect human and animal health, while still promoting the importance of protecting bats and their habitats.

For example, in Bangladesh, Nipah virus outbreaks occur annually in rural communities, with mortality rates as high as 100 percent. Through our collaborative research with ICDDR, funded by the National Institutes of Health, we know that Nipah virus is carried by the Indian flying fox — a large fruit bat that is vitally important to agriculture throughout South Asia, and that spillover of this virus occurs when date palm sap — a delicacy harvested in western Bangladesh, is contaminated by bats as they drink from the collection vessels. This agricultural practice has created the opportunity for humans to be exposed to a bat virus that otherwise would not occur, and the solution is simple—cover date palm pots, prevent bats from contaminating sap, and the risk of spillover will be significantly reduced. At the same time, we promote conservation of these bats through ecological research, in partnership with federal wildlife agencies, and through educational outreach to the public. In Bangladesh, Thailand, and Malaysia, we are working with local partners to promote community awareness of the importance of flying foxes.

In 2009, we conducted a study of bat migration and the impact of hunting in Malaysia, in partnership with the Malaysian Department of Wildlife and National Parks, showing that flying foxes are migratory and require international management and protection from hunting which has been occurring at unsustainable levels. Protection for flying foxes has since increased in Malaysia, and we continue to work closely with the wild-

life department to better understand bat diversity and abundance across different habitat types in Peninsular Malaysia and Sabah, Borneo.

In addition to our in-depth investigations of Nipah virus, SARS, and other diseases, we have been at the forefront of viral discovery, finding more than 100 novel viruses in bats from around the world, including some that may have given rise to hepatitis C and related viruses long ago. By understanding the origins of human disease, we may be able to prevent the emergence of similar viruses and help save lives.

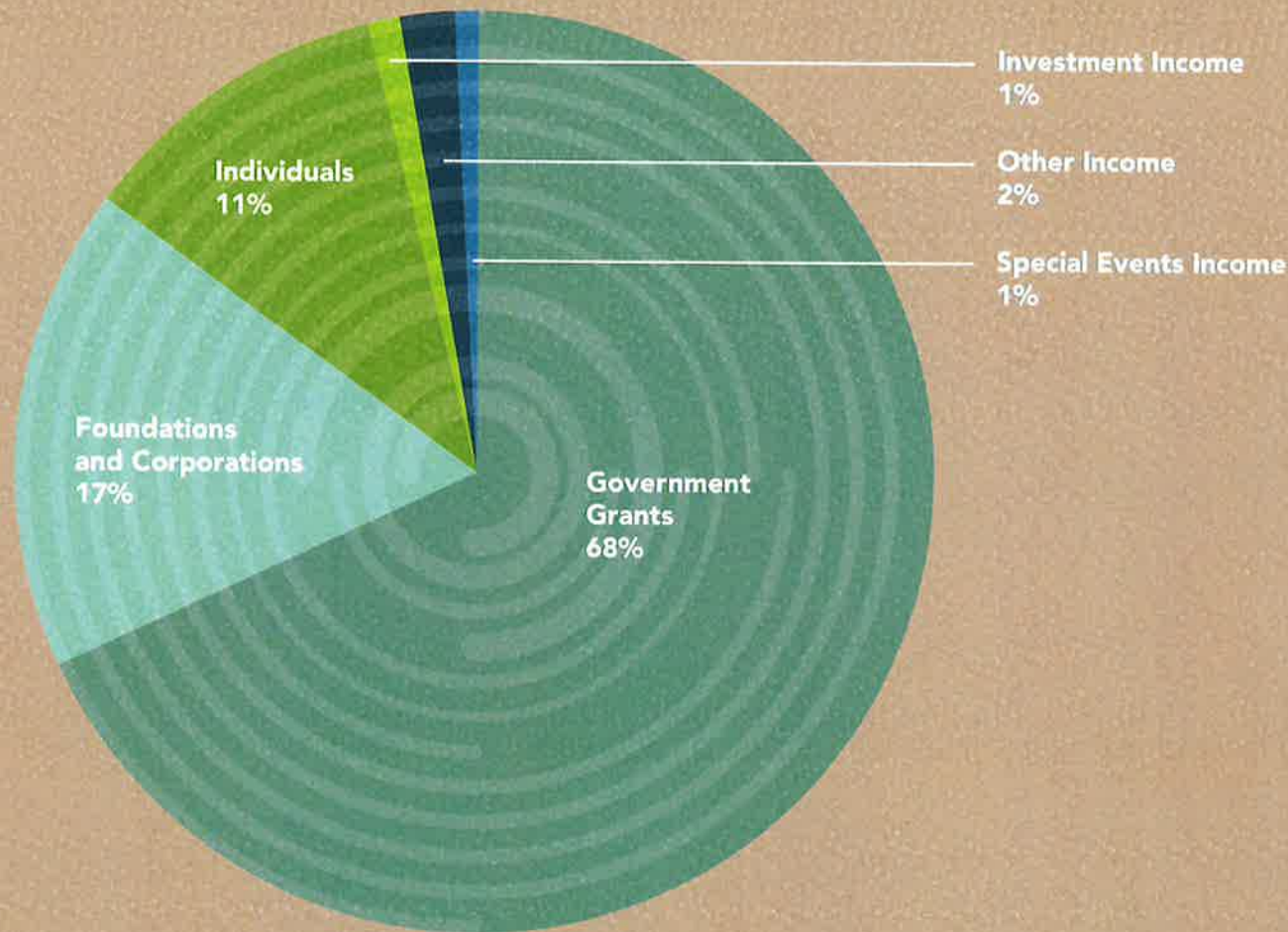
EcoHealth Alliance scientists are highly experienced in safe wildlife capture and take great care to work with bats and other animals in a humane way — using non-destructive sampling techniques that include catching, sampling, and releasing bats on site, and using anesthesia where appropriate to minimize stress on the bats. EcoHealth Alliance scientists have described these techniques, as well as the importance of bat conservation, in a manual on bat disease investigation that was distributed globally by the United Nations Food and Agriculture Organization. Our scientists also serve as scientific advisors to conservation organizations, including the Lube Bat Conservancy, the Southeast Asian Bat Conservation Research Unit, and the IUCN Bat Specialist Group.

**Today more than ever, wildlife is coming into increasing contact with people because of human-induced changes to the environment causing a significant increase in emerging disease outbreaks worldwide.**



# FINANCIAL STATEMENTS

## EcoHealth Alliance Income Statement FY2012



### FY2012 Income

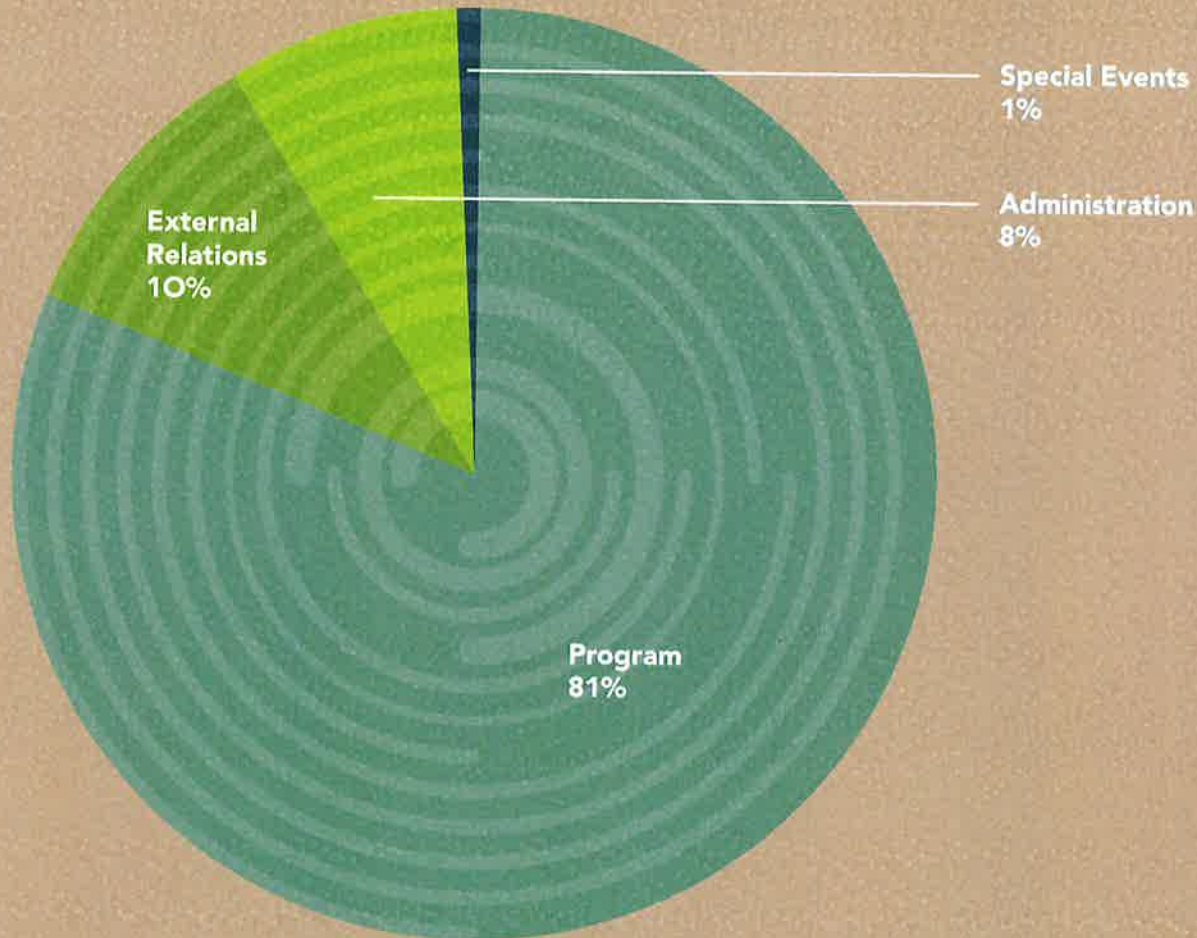
Government Grants	\$ 5,834,820.
Foundations and Corporations	\$ 1,440,678.
Individuals	\$ 909,343.
Investment Income	\$ 116,869.
Other Income	\$ 185,590.
Special Events Income	\$ 65,346.
<b>Total Income</b>	<b>\$ 8,552,646.</b>

The Consolidated Statements of EcoHealth Alliance as of June 30, 2012 including the Consolidated Balance sheet, Consolidated Statement of Activities, Consolidated Statement of Functional Expense, and Consolidated Statement of Cash Flows were audited by the firm of Loeb & Troper. The above presentation has been derived from those audited financial statements. Copies of the audit as well as the Internal Revenue Service Form 990 tax return are available upon request to Harvey Kasdan, Chief Financial Officer at 460 West 34th Street, 17th floor, New York, NY 10001.



# FINANCIAL STATEMENTS

## EcoHealth Alliance Expense Statement FY2012



### FY2012 Expenses

Program	\$ 6,894,466.
External Relations	\$ 871,644.
Administration	\$ 690,163.
Special Events	\$ 92,458.
<b>Total Expenses</b>	<b>\$ 8,548,731.</b>
Change in Net Assets	\$ 3,915.
Distribution to Durrell Wildlife Conservation Trust	\$ 1,872,785.
<b>Ending net assets</b>	<b>\$ 3,461,204.</b>

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# EcoHealth Alliance

## SENIOR MANAGEMENT TEAM

Dr. Peter Daszak  
*President*

Dr. William Karesh  
*Executive Vice President for Health and Policy*

Joanne Mazurki  
*Executive Vice President for Marketing and Development*

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**Local conservation.  
Global health.**

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