

EXHIBIT 34



EcoHealth Alliance

Fiscal Year 2016
Annual Report



The impala is found mainly in eastern and southern Africa, an area known for Rift Valley fever outbreaks, one of the diseases our scientists are researching.



**EcoHealth
Alliance**

OUR MISSION

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health, and delicate ecosystems. With this science we develop solutions that promote conservation and prevent pandemics.

OUR VISION

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.

To learn more, please visit
www.EcoHealthAlliance.org





FY16 Board of Directors

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 provides 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.



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“Because of you, we’ve both expanded, and continued to put out first-rate scientific research. In the last year alone we grew by twenty percent, and put out more than forty published papers.”



Letter from the Chair

Dear Friends,

Our fiscal year is coming to a close. While a new year of triumphs and challenges is just around the corner, I would like to take the time to thank everyone who has moved this great organization forward in the last year.

EcoHealth Alliance is first and foremost a science organization. Throughout the year, I am struck time and again by the brilliance and dedication of our scientists, who work in disease hotspots around the globe. Our scientists are epidemiologists and veterinarians; they are ecologists and evolutionary biologists; economists and policy changers. They are kind and courageous people making a difference in the world.

We wouldn't be the organization we are without the pioneering spirit of our field scientists, nor the professionalism of our wonderful administrative and office staff, whose dedication and hard work hold this great non-profit together. We also couldn't thrive without the support of our donors. Because of you, we can continue to publish first-rate scientific research and increase the scope of our global impact. In the last year alone we grew by twenty percent, and wrote more than 40 published papers. Our influence in Washington, DC has never been greater thanks to the insight and the reach of our Health and Policy professionals, while our modeling and technology teams have made us one of the most innovative public health non-profits in the world.

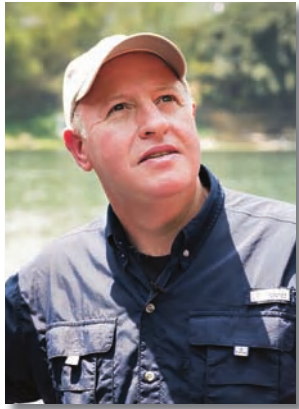
As we've grown, we've added more aspects to our pandemic prevention programs. In China, we began research to understand how diseases like Avian flu travel via the wildlife trade. In Malaysia, our work on disease and deforestation took on a new dimension as we began outreach in developing communities with local partners. Back in New York, we developed software with funding from the Department of Defense that tracks the movement of disease outbreaks along commercial flight paths. Lastly, in South Africa, our team forged ahead to contain Rift Valley fever, a disease some have called 'The Next West Nile,' that devastates livestock and sickens local communities.

None of this could have happened without you. You've been behind every article that we have published, every crisis we have prevented, and every life that we have saved. From all of us at EcoHealth Alliance, my heartfelt thanks. Your support and dedication bring us that much closer to living in a world without pandemics.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ellen' followed by a stylized flourish.

Ellen Shedlarz,
Chair, EcoHealth Alliance



Letter from the President

Dear Friends,

It's that time of year again. Most of our scientists have flown abroad for a long summer of fieldwork, and a calm has settled on our New York office. It's a good time to reflect, and to share how far EcoHealth Alliance has come in the past year.

Thanks to your constant support we've continued to expand the scope of our global pandemic detection endeavors; we've made serious headway in South East Asia with new outreach and research efforts around disease economics and deforestation; and we've been able to provide more guidance to agencies and corporations on the path to sustainable decision-making. But one project I'm particularly excited to tell you about is our South African Rift Valley fever (RVF) work. Rift Valley fever is a disease transmitted by mosquitoes that predominantly affects livestock—causing stillbirths and abortions in cattle and sheep. While it can be life-threatening to people, its worst effects are economic. If left unchecked, it can ravage not only a community, but an entire country's livestock sector.

Though other organizations are studying RVF, the project we're involved in is the only one which takes into account mosquito abundance, rainfall and vegetation, soil quality, and the immunities of both wild and domestic animals. This take on disease ecology is called a "One Health" approach. It means we don't think of human health as separate from animal or environmental health. It means we see them as intimately linked. That's why our scientists are on the ground, working across disciplines, and learning directly from the farmers and shepherds affected by RVF so they can stop the next outbreak before it even begins. They're reaching partners across the line dividing public and private organizations; governmental and non-governmental sectors. Even NASA is helping us with this one. It's groundbreaking work that pushes science forward, and saves lives.

EcoHealth Alliance scientists are continually called upon for their expertise in wildlife-borne viruses. In the past half-century, pandemic-level diseases have emerged at a rate unprecedented in medical history—HIV/AIDS, Ebola, Nipah virus, SARS, West Nile virus, Lyme disease, MERS, and RVF. Drawing together the disparate data behind these outbreaks, we've synthesized a map of global 'hotspots' to help us identify where the next major pandemic will emerge. We've been working in the conservation space for more than 40 years, saving species and habitats from the massive changes being inflicted upon the planet's wild landscapes. We do this by using public health concerns as leverage to protect wildlife and their habitats from deforestation, intensive agricultural expansion, and the adverse effects of global travel and trade.



Like any disease we study, RVF could one day come knocking at our door. Our work in South Africa gives us a timely look under the hood of this potential pandemic so that if it does start to spread, we'll know how to contain it. We work this way because we know the time and money spent preventing a disease today will provide an amazing return on investment by saving lives and sustaining our environment. In reading this report, my hope is that you're reminded of just how critical our work is to the health of our planet and its people. From all of us at EcoHealth Alliance, many thanks for your dedicated and passionate support – you make our triumphs possible.

Cheers,

A handwritten signature in blue ink, appearing to read 'P. Daszak', with a horizontal line underneath.

Dr. Peter Daszak,
President, EcoHealth Alliance

“Like any disease we study, Rift Valley fever could one day come knocking at our door. Our work in South Africa gives us a timely look under the hood of this potential pandemic so that if it does start to spread, we’ll know how to contain it.”

Our “ONE HEALTH” Approach

A “**One Health**” approach considers the integral links among human, animal, and environmental health. Our research has shown that the rise in disease emergence originates from the things we do to alter the natural environment.

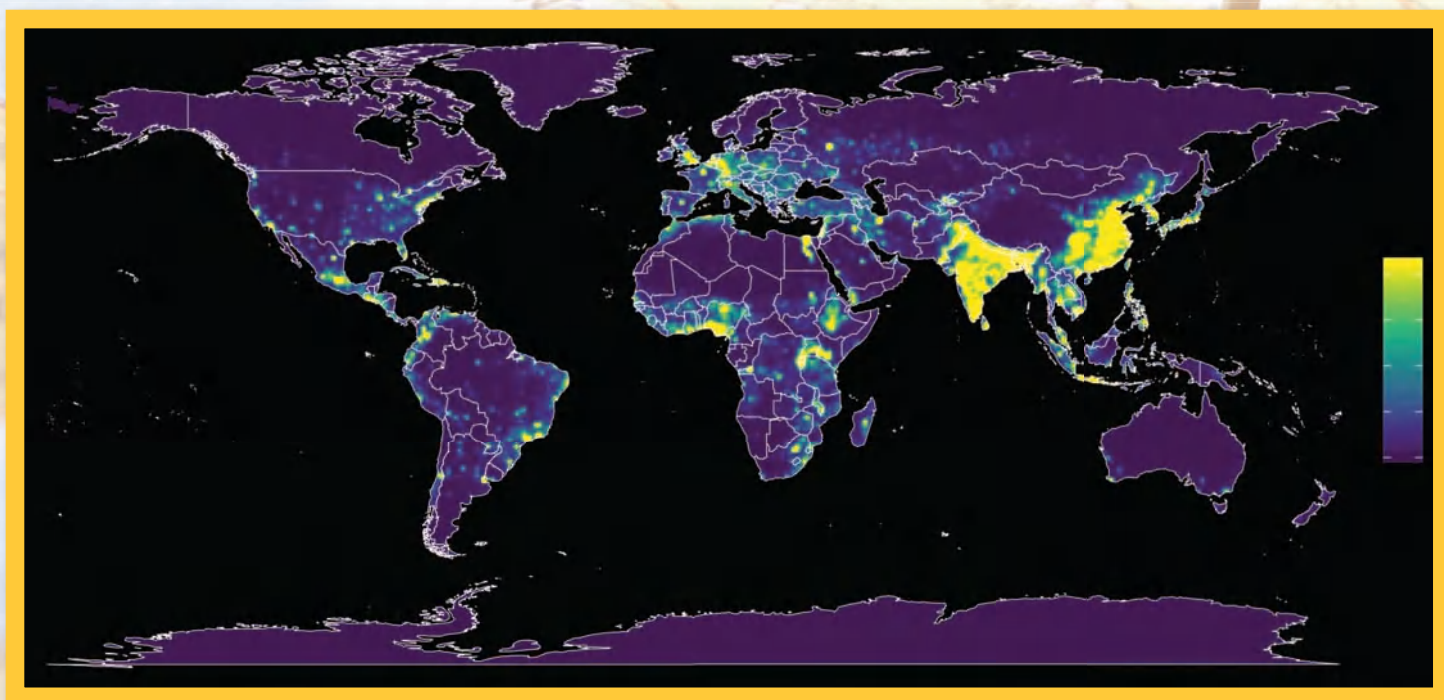
Environmental Health: With deforestation comes great loss of biodiversity and greater risk for disease spillover. Using data and economic research, we’re showing corporations it’s good business to leave forests intact, plain and simple.

Animal Health: The market for wild animals and animal products comes with a significant risk to wildlife worldwide including extinction, spread of disease, and the introduction of invasive species into delicate ecosystems. We’re working with governments all over the world to spread awareness and mitigate wildlife trade.

Human Health: The more humans come in contact with wildlife, the higher the risk of an emerging infectious disease outbreak. We’re collaborating with other organizations to identify how pandemics emerge, and training professionals in disease prediction and prevention methods.



WHERE WE WORK



Using environmental and health data covering the past 60 years, EcoHealth Alliance created the first-ever Global Hotspots Map of regions likely to have an emerging disease outbreak. Using that map as our guide, we work in at-risk areas to mitigate wildlife trade, slow deforestation, and put measures in place for disease detection and prevention.

PANDEMIC PREVENTION

THE PROBLEM:

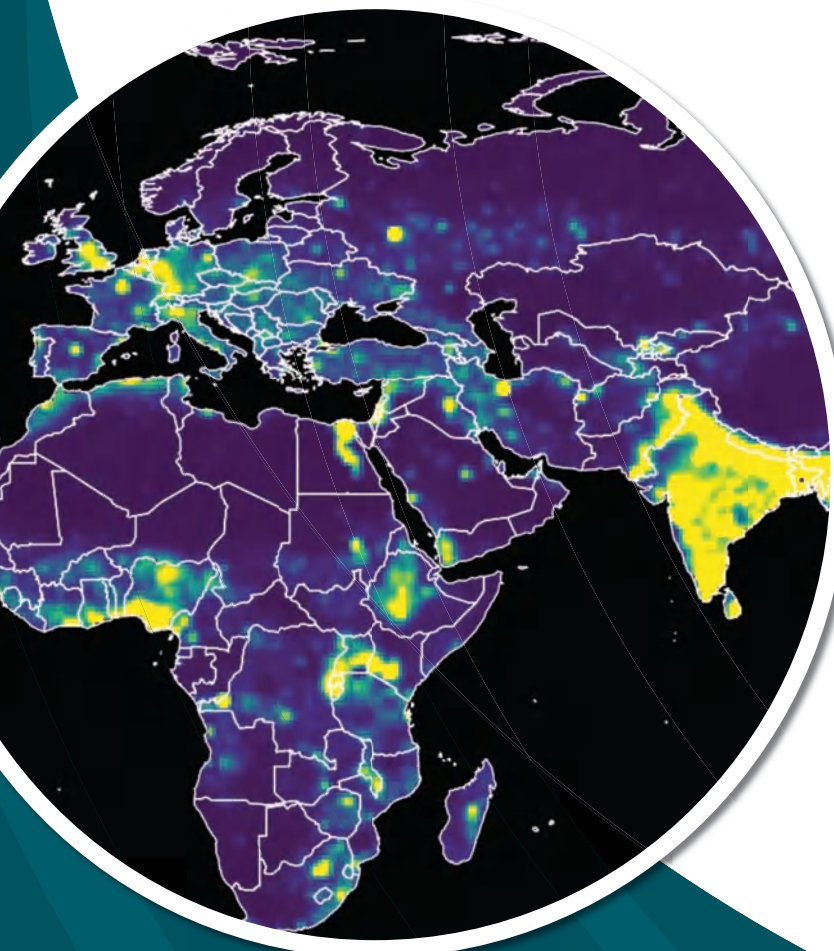
There is a very alarming pattern in how we deal with emerging infectious diseases. Consider the H1N1 (swine flu) outbreak of 2009. From the first reported cases in Mexico in April of 2009, to just two months later, 73 countries reported outbreaks of H1N1 and the World Health Organization (WHO) declared it a global pandemic. In just one year, two billion people were infected with the virus and it's estimated that 12,469 people lost their lives to the disease. Additionally, the cost to address the disease is estimated to be between \$45-55 billion.

After the first cases were reported, scientists worked quickly to produce a vaccine. But it's not

until six months after the initial case that a proven treatment had been tested and enough produced to distribute to just seven percent of the world's population. After a year, enough was produced for 20 percent of the world's population.

Zika, Ebola, MERS, SARS, and many other outbreaks have been dealt with in a similar fashion. When a disease hits, it's a race to find the source, disease pathways, individuals exposed, treatments, etc. all while working to minimize the destruction of the outbreak.

Over 15 million people die each year due to emerging infectious disease outbreaks. With approximately 60 percent of those diseases coming from animals, and an estimated 1.3 million undiscovered viruses in mammals around the world, it's vital we put measures in place now to prevent outbreaks rather than react to them.



Who stands between you and the next pandemic?



WHAT ECOHEALTH ALLIANCE IS DOING:

Working in the U.S. and more than 30 countries worldwide, EcoHealth Alliance scientists research the factors that cause disease outbreaks, and implement preventive measures to stop pandemics before they begin. With your support, we are:

- ✓ Researching when, where, and how diseases like Ebola, Rift Valley fever, Malaria, MERS, and SARS jump from animals to humans.
- ✓ Training in-country scientists in disease detection and prevention methods.
- ✓ Working and collaborating with non-profits, local governments, and other like-minded organizations to strengthen policy and capacity.
- ✓ Making our research freely available so others can benefit.
- ✓ Building and launching open-source biosurveillance tools.
- ✓ Educating local communities on how they can protect themselves from diseases while helping to preserve the natural environment.

SLOWING DEFORESTATION

THE PROBLEM:

Approximately 18 million acres of forest (about the size of Panama) are being cut down each year. From 1990-2015 alone, over 300 million acres of forest were cleared. Deforestation causes a wide variety of damaging effects including accelerating climate change, contributing to biodiversity loss, displacing indigenous communities and wildlife, driving disease emergence, causing floods and landslides, and negatively affecting economies.

Additionally, land conversion increases human contact with wildlife and alters the ecological dynamics of pathogens, creating new pathways

for disease transmission. Nearly half of all emerging infectious diseases are linked to changes in land-use patterns (e.g. cutting down forest for cropland or pastures). That number is expected to rise as the population grows and more forest is cut down to keep up with demand.

The consequences of clearing land are far reaching and while local communities, biodiversity, and ecosystems are most impacted, deforestation has a ripple effect and touches every living thing on this planet.

WHAT ECOHEALTH ALLIANCE IS DOING:

We are partnering with governments, agricultural and extractive industries involved with land-use change to help them transition to more sustainable practices. We measure the economic and health costs of disease to demonstrate the cost savings of moving away from deforestation. Past attempts to encourage more sustainable practices have been marginally successful because we were making the argument for conservation alone. By framing this issue in economic terms, we are able to more effectively reach policy-makers, industry leaders, and local communities. With your help, we are:

- ✓ Conducting research in Southeast Asia on the damaging effects of deforestation with specific focus on palm oil plantations.
- ✓ Measuring disease prevalence along a forest gradient, i.e. understanding how many diseases are present in pristine forest versus forests that are being cleared, and completely cleared areas.
- ✓ Calculating the economic and health costs of disease outbreaks due to deforestation.
- ✓ Developing and promoting best practices, research, and reduced-impact land-use guidance.
- ✓ Working with local government to change policy to protect pristine forest.



Saving a forest in Malaysia has a lot to do with saving you.



**A healthy gorilla
makes a healthy you.**

STOPPING THE ILLEGAL WILDLIFE TRADE

THE PROBLEM:

For food, medicine, products, or pets, wild animals are being traded around the world at dizzying rates -- approximately 350 million animals are traded annually. Despite dwindling species populations, an increase in animal-to-human diseases, and stricter trade policies and punishments, the amount of money exchanging hands in this business makes it well worth the risk for traders.

In many areas of the world, wildlife trade is a deeply-rooted tradition. There are many beliefs in the healing properties that animals possess: everything from soothing arthritis with tiger bones to using rhinoceros horn to treat a fever.

When the SARS epidemic hit China in 2003, EcoHealth Alliance scientists were called in to investigate the source of the outbreak. We followed the trail back to bats and civets in an open-air "wet" market in southern China.

That outbreak brought about stricter regulations on wildlife being sold at market. The mobilization of the government in regulating trade is positive, but many challenges still remain and as long as the demand exists, poachers and middlemen will find a way to make wildlife products available.

WHAT ECOHEALTH ALLIANCE IS DOING:

We are focusing our efforts in the most heavily trafficked areas of China. Working with local Chinese not-for-profit organizations, government officials, wildlife farmers, and community members, we are using science, policy, and education to stop the illegal wildlife trade. With your help, we are:

- ✔ Using research and data to map trade routes and networks to find and stop the sources of illegal wildlife trade.
- ✔ Meeting with key members of communities all over southern China to understand what trade practices are being used, and how these practices are putting animal and human health at risk.
- ✔ Working with other non-profit organizations in China to educate the public on why species conservation is important.
- ✔ Working with the government to implement stricter trade policies.



SPOTLIGHT ON

ECOHEALTH ALLIANCE SCIENTIST
DR. MELINDA ROSTAL
SENIOR RESEARCH SCIENTIST



Q Can you tell us about the route you've taken to get to EcoHealth Alliance?

A I wanted to be a veterinarian since I was five. For my senior thesis at Princeton, I was fortunate enough to be selected to go to Kenya, where I worked with my advisor on zebra behavior. At the time, I initially thought I was really interested in the behavior and the physiology of animals, but I soon realized that all the research papers that I wanted to read were actually conservation papers. So that sort of piqued my interest and made me realize I actually wanted to focus more on conservation rather than the physiology of animals.

Q What got you into the public health side of conservation?

A When I went to Veterinary school, I continued volunteering over my summers. I got to go again to East Africa and see how beautifully preserved the land within the national park is there. That is, until you hit the border. Just on the other side, there are no trees, there isn't anything—just slash and burn agriculture. What struck me was how sudden the change was. So while I was interested in animal health and conservation, I knew that unless we did something with the people—something to help the people living around these parks—there was going to be no way we could really save the animals. You can't blame people who go into the parks to get food and fuel because they need to feed their families. If we can work with them to help raise their standard of living and improve their public health infrastructure, we can potentially improve local conservation efforts. This is a global health and conservation issue and was one of the primary reasons for completing my public health degree during veterinary school, and also gave me the opportunity to start my research on Rift Valley fever virus, which I began in 2006.

Q People have known about Rift Valley fever since the 1930's. Why is it getting more attention now?

A Rift Valley fever is important for several reasons. When an outbreak occurs, a country can suffer huge economic losses. The disease

can devastate livestock populations, and it can also be fatal in human populations. During the 2010 outbreak in South Africa, a published report estimated that the outbreak cost about 20 million U.S. dollars in losses. And that's just in the sheep industry. The amount is much larger once you include cattle and goats (and potentially wildlife), in addition to other livestock. These vector-borne diseases are notoriously hard to get rid of. It's hard to control mosquitoes without using really toxic chemicals. We used to have quite a bit of malaria and yellow fever in the U.S. until the advent of DDT and the yellow fever vaccines. We eradicated them from the U.S. through parts of the Caribbean, Mexico, and other areas in Latin America. Until they realized the adverse effects DDT was having on us, the environment, and on other animals.

Q What's the impact of Rift Valley fever on a farmer or a shepherd?

A The biggest impact that Rift Valley fever has on farmers and shepherds, besides being the most at-risk of catching it, is loss of livestock. You not only have a lot of young animals dying, but also as many as 100 percent of pregnant animals with still-births. That's a huge loss. They're essentially losing an entire year's worth of young animals.

Q Can you give us a sense of how the disease emerges?

A Two different types of mosquitoes spread Rift Valley fever. One is a floodwater mosquito - they hatch when there's a lot of flooding and abnormally high amounts of rainfall. The other type is actually a collection of various mosquitoes that are always around during normal amounts of rainfall which are called "amplifying mosquitoes". When flooding happens, these depressions in the land called pans, or dambos, fill with water. Some are very small and some are as big as a kilometer across. When they get flooded to a high enough level, you get floodwater mosquitoes. Those floodwater mosquitoes can transmit the virus to their eggs, so some of those hatching are already infected with Rift Valley

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fever. They hatch and infect livestock like cattle, sheep, and goats. And they also infect wildlife, like antelope and buffalo. Now, the amplifying mosquitoes—the mosquitoes that are always there in some abundance—bite those infected animals, become infected in turn, and move on to infect other animals, and so on. People can get RVFV by working around infected animals or by being bitten by an infected mosquito.

Additionally, that vaccine can potentially be picked up by a mosquito, and that means both the vaccine and the actual virus are together. They can then mutate and make a more virulent strain. That's probably the worst case scenario. It's really hard not to vaccinate during an outbreak because you want to do something, but it needs to happen before the actual outbreak occurs. That's why it is so important we get ahead of outbreaks rather than react to them.

Q What are the best and the worst case scenarios for an outbreak?

A The best case scenario is that we have an effective prediction model to identify when an outbreak will occur several months before it happens and, most importantly, that people trust it. Then ensure that enough vaccine is produced, and the farmers are able to vaccinate their animals in time.

The work we are doing can be used to improve these predictive models, but we are also trying to understand something about habitat, specifically the micro-habitat and where exactly the infected mosquito eggs are being laid. Understanding that habitat means looking at soil and plant types, and geological features. The hope is that we can use a method like targeted spraying to focus on those specific, infected mosquitoes, rather than spraying everything that's flooded, which is just a huge area.

The worst case scenario is: we don't predict an outbreak, and farmers or government officials are vaccinating the livestock with the modified live vaccine during the outbreak. While that vaccine induces the strongest response in animals, it can cause animals to abort. When that happens, you don't know whether your animal aborted because of the infection or because of the vaccination.

Q What's your favorite aspect of the project?

A What I love about the Rift Valley fever virus project is that it's a really good example of "One Health". It's a disease that really requires looking at the health of animals, the health of people, the health of the environment, and how those different elements all interlock and interlink. That's really important, because a lot of zoonotic diseases that fall under "One Health" often have some environmental component that's left out. But with Rift Valley fever, you really have to include the environmental component to understand how it works. You have to understand the rainfall, the soil, the vegetation, and the vector, in addition to understanding how the virus acts in various populations of domestic animals, wildlife, and people.

Q What can people who are not directly involved in pandemic prevention do to stay safe?

A Wash your hands. Really. And cook your food. Aside from that, I'd say remember that every action is linked. Take turning your lights off to save energy, for example. This

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is a common thing people talk about when they talk about the environment. But what many people don't realize is that that one action can butterfly into stopping a pandemic. You turn your lights off. You save energy which is developed from coal which is being mined from areas where the environment is being degraded. Wherever you have that sort of massive, large-scale environmental degradation, the wildlife living in those places is going to have to move. And as they move and start adapting to living with us, we're more exposed to whatever viruses they might carry. There's also equal opportunity for our diseases to jump into animals.



the mammal diversity on the planet, so it's actually the smaller animals that we have the most contact with.

The bottom line is that we—humans—are the reason we're at higher risk. Even though we're losing animals, the actions causing those losses—like deforestation or urbanization—are exposing us to more new diseases.

Q Humans and livestock make up 96% of the earth's large mammals. That leaves 4% of large, wild mammals. Yet, we are seeing more diseases jump from wild animals to people. Is it that the contact we have with them is increasing?

A I think there are several pieces to that. One is that with globalization you can go around the world in 24 hours. When Columbus was sailing across the ocean, anyone who got infected on that trip probably died on the boat because it took them however many weeks or months to reach the Americas.

Secondly, we aren't getting more diseases based on the ratio of animals to people (which may be decreasing due to high extinction rates). More likely, it is because the human population is spreading everywhere, humans are potentially having more and more contact with animal species that we previously didn't have contact with before.

Third, small mammals, like bats and rodents, make up together about 70 percent of

Q What's next for you?

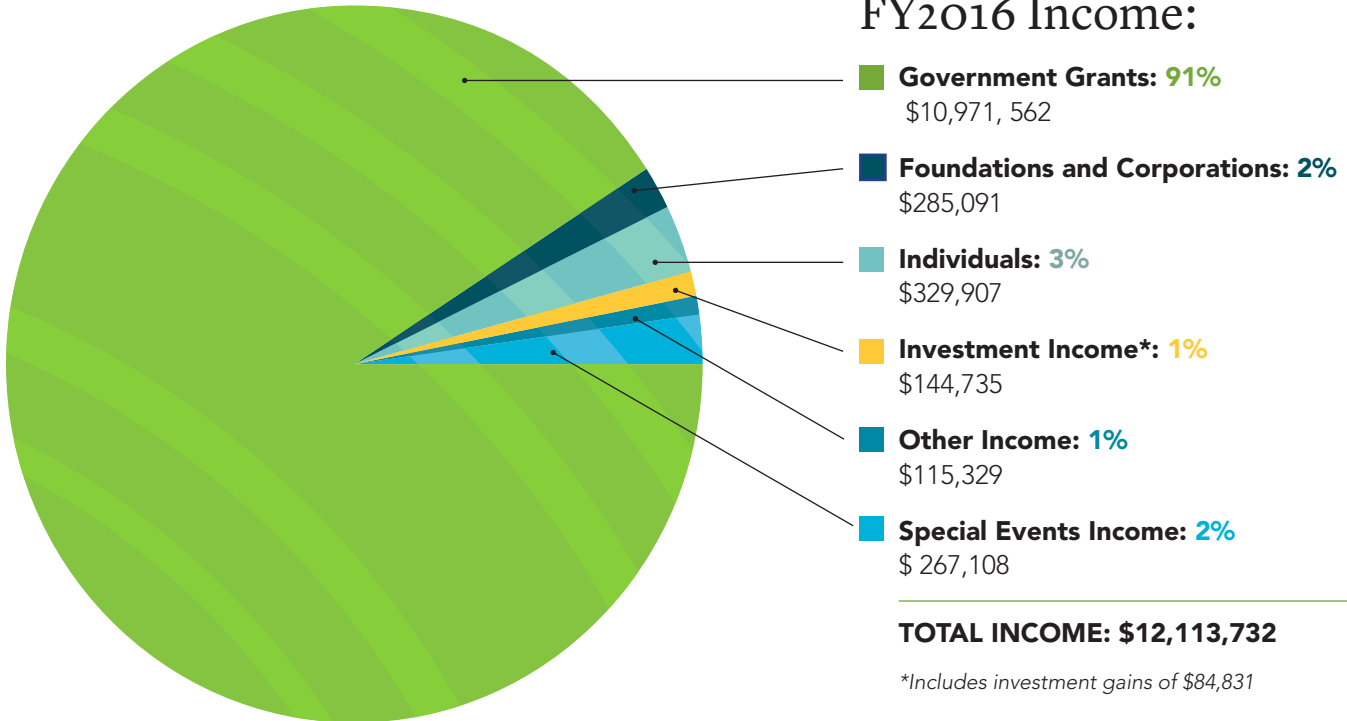
A We [EcoHealth Alliance] still have a lot of work to do on Rift Valley fever and PREDICT [our pandemic prevention project] and Rift Valley fever, and we hope to continue both of them through additional funding periods. I'm also interested in working with macaques [on B-virus shedding] in Asia. We've done some work in Bangladesh with them, and I'd love to see that work get funded. I think that would make a big difference in conservation and in human health.

In general, I want all my projects to involve "One Health", and to make sure that the results of our research get back to the communities, countries, and scientists we work with.

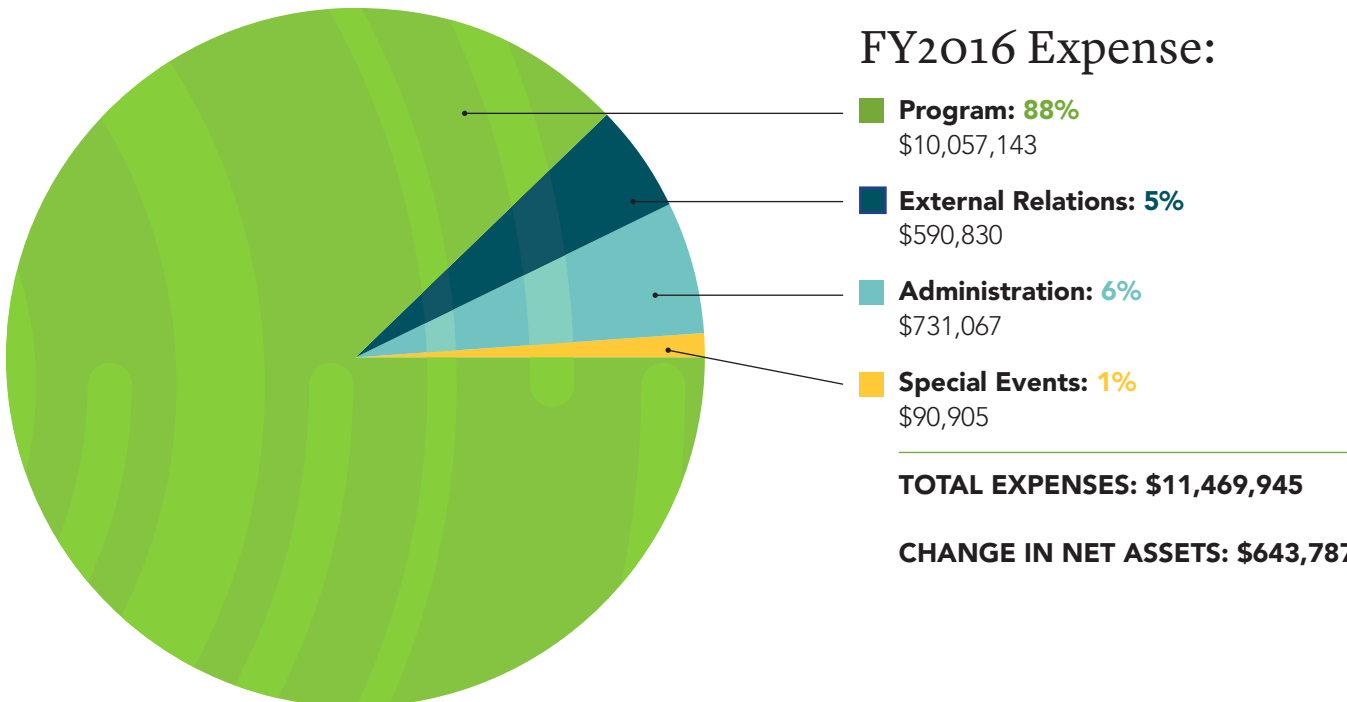
EcoHealth Alliance

FINANCIAL STATEMENTS

FY2016 Income:



FY2016 Expense:



The firm of Loeb & Troper audited the Consolidated Statements of EcoHealth Alliance as of June 30, 2016 including the Consolidated Balance sheet, Consolidated Statement of Activities, Consolidated Statement of Functional Expense, and Consolidated Statement of Cash Flows. 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 Armine Arustamyan, Chief Financial Officer at EcoHealth Alliance, 460 West 34th Street, - 17th floor, New York, NY 10001.



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