

The value of increasing the role of private individuals and organisations in One Health

T. Mörner ^{(1)*}, J. Fischer ⁽²⁾ & R. Bengis ⁽³⁾

(1) Department for Disease Control and Epidemiology, Swedish National Veterinary Institute, SE – 751 89 Uppsala, Sweden

(2) South-eastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, University of Georgia, Athens – GA 30602, United States of America

(3) P.O. Box 2851, Port Alfred 6170, South Africa

*Corresponding author: torsten.morner@sva.se

Summary

Few non-governmental organisations (NGOs) have been involved in work with wildlife diseases and the One Health concept. However, there are several NGOs and scientific institutions, on international and national levels, that can potentially play a significant role in furthering the objectives of the One Health concept by contributing to wildlife health or wildlife disease knowledge and collaborations. This is because many NGOs have dedicated members that voluntarily become involved in the wildlife aspect of the One Health concept, in many different ways. The authors have identified six international organisations, and ten national organisations that could well be involved in this work. They recommend that the World Organisation for Animal Health (OIE) Delegates, and OIE National Focal Points for Wildlife in different countries, focus on establishing links and collaboration between the Veterinary Services (including Focal Points) and various NGOs, as well as scientific institutions both on a national level and international level.

Keywords

Disease – Lobbying – Media – Monitoring – Non-governmental organisation – One Health – Surveillance – Wildlife.

Introduction

One Health has been defined as ‘the collaborative effort of multiple disciplines – working locally, nationally, and globally – to attain optimal health for people, animals and the environment’. The One Health concept explores the opportunities that exist to protect public health through policies aimed at identifying, preventing and controlling pathogens circulating in wild and domestic animal populations, at the interface between humans, animals and the environment.

The One Health concept was traditionally driven by governments and inter-governmental organisations focused on health. However, in order to make the One Health concept broader and more effective, it would be advantageous to include scientists, political leaders, various organisations and also individual members of the public in the work. These people and organisations could potentially play a significant role in several aspects of the One Health concept, including disease surveillance and monitoring, pathogen or disease reporting, assisting in the field during disease outbreaks, lobbying, informing and educating the

public (organisations can also educate their membership), contacting the media, and more.

Why is it important to include wildlife-oriented non-governmental organisations in the One Health concept?

Veterinary Services worldwide have traditionally focused mainly on diseases, including zoonoses, and disease outbreaks in domestic animals, while wildlife diseases have been handled by other institutions or government departments not responsible for domestic animal health. Wildlife and wildlife health legislation is frequently separated from legislation for domestic animals, and in many countries there is little or no contact, communication or cooperation between domestic animal and wildlife authorities on a regular basis. The current situation in many countries is that diseases in livestock and companion animals are handled by ‘agriculture’ authorities,

while wildlife is handled by environmental or wildlife authorities. This may lead to situations where wildlife disease issues are neglected or a mismatch exists between expertise and legal authority (1).

Fortunately, this situation has been recognised and changed in recent years in many countries; human and veterinary health agencies are now broadening their approach to include wild animals in the surveillance and management of animal diseases and zoonoses. Excellent examples of this are the establishment of the OIE Working Group on Wildlife, which was founded in 1993, and the improved reporting of wildlife diseases by national Veterinary Services by means of the OIE World Animal Health Information System (WAHIS).

There are several differences between domestic animals and wildlife that may affect the reporting of diseases. Domestic animals have an owner who has a personal and often an economic interest in the health of the animals, while free-ranging wildlife have no individual owners. Another difference is that domestic animals are in captivity under supervision of their owners, and disease or mortality is more easily detected, while disease and mortality in wildlife may proceed for a long time before they are detected and reported to veterinary or wildlife authorities. For this reason, if we aim to increase the reporting of diseases and mortality in wildlife, we need to find additional ways of detecting and reporting wildlife disease events, and we need to identify the organisations, institutions and individuals to involve in this effort (1, 2).

There are many non-governmental organisations (NGOs) working with wildlife on an international and national level. Some of these organisations, such as hunting or wildlife management organisations, have the issue of wildlife health and diseases on their agenda and are already involved in wildlife health. Members of hunting organisations are interested in the health of wildlife for many reasons. First of all, they often consume the meat and are therefore interested in foodborne diseases that can be transmitted from game to humans. They are also interested because healthy herds can have better reproductive and recruitment success, which increases the numbers and quality of the animals that can be hunted, and outbreaks of certain diseases may impact wildlife numbers at the population level. There are also ecological management organisations that are not directly involved in hunting, but they support wildlife by improving rangeland and habitat for wild animals, as well as by improving their distribution and protection.

However, the degree of interest in wildlife health and diseases varies between different NGOs and between government sectors, with some showing very little interest at all. For example, some conservation organisations do not consider wildlife health or diseases as their responsibility or primary field, and are therefore not interested or involved in monitoring, managing or reporting wildlife diseases.

However, most of these organisations are involved in the ecology and management of many species and could well become involved in wildlife health issues.

Another reason why NGOs could play an important and significant role in wildlife health and the One Health concept, is that most NGOs consist of individuals who voluntarily engage themselves in wildlife issues because of a certain hobby or interest. These individuals are passionate about their interest and may willingly become involved in work with wildlife health issues. In addition, since they work on a voluntary basis, they would help reduce government spending and save taxpayers' money. National nature-oriented NGOs often have their membership distributed all over a country, with members spending significant time outdoors in nature. They therefore know the environment and their home grounds, and this can be of vital importance in disease surveillance, monitoring and reporting.

Non-governmental organisations can also play a very important role in One Health as lobbying organisations. Many of these organisations have good contact with the media and important government officials, as well as other national or international authorities. Therefore, in addition to keeping their members informed about wildlife disease and One Health issues, they can be an important factor in disseminating information to a wider audience.

Scientific institutions at universities and other institutions could also play an important role in the One Health concept and work with wildlife health, even if they are not linked to the veterinary or medical fields, because many are involved with biological or ecological studies, including the study of population dynamics and demography (2). In addition, they are often involved in projects where there is a need to handle wild animals, which opens up the possibility of sampling these animals for surveillance purposes, as an 'add on', thereby maximising the use of resources, and reducing costs. In many institutions there are various projects that study population dynamics and distribution demographics, which can be important factors and indicators of wildlife health.

Which non-governmental organisations already play a role in preventing, detecting and managing wildlife diseases?

International organisations

On the international level there are several examples of NGOs that work with wildlife diseases in one way or another. Several of those organisations, principally

those that have a global approach on a larger scale, are discussed here.

Wildlife Disease Association

The Wildlife Disease Association (WDA) (www.wildlifedisease.org) is an international organisation, established in 1951, with more than 1,000 members in regional and disciplinary sections all over the world. The WDA and its members are involved in many different studies and projects concerning wildlife and wildlife diseases. For more than 60 years, the WDA has published what is now called 'One Health' research, facilitated One Health solutions to wildlife conservation challenges, and promoted One Health education. The WDA's mission has long been to 'acquire, disseminate, and apply knowledge of the health and diseases of wild animals in relation to their biology, conservation and ecology, including interactions with humans and domestic animals'. This is certainly consistent with the One Health concept. Most recently, WDA's slogan says it all: 'All Wildlife Diseases, All Conservation, All One Health, All the Time!'

Many WDA members are addressing the complex issues of ecosystem health. Topics of special concern include aquatic animal health, as many marine mammals and sea birds serve as biomarkers or sentinels for the assessment of the health of the marine environment, and the multiple interactions resulting from human and domestic animal encroachment into wild habitats.

Understanding the transmission dynamics and impacts of diseases in wildlife populations is crucial to the future conservation of wildlife. Thus, members conduct research on endemic and exotic diseases in wildlife populations, in order to understand the epidemiology, ecology and impacts of diseases in these populations and in the ecosystems that support them.

The WDA publishes the *Journal of Wildlife Disease*, with four issues per year, and a quarterly newsletter online.

Conseil International de la Chasse/International Council for Game and Wildlife Conservation

The *Conseil International de la Chasse* (CIC) (www.cic-wildlife.org) is a politically independent advisory body that aims to preserve wild game and hunting. It is an international NGO with its headquarters in Hungary, with state, association and individual members worldwide. To achieve the goal of being an advisory body in the field of conservation and hunting, the CIC promotes the sustainable use of wildlife resources, which includes recognising the potential impacts of wildlife diseases on wildlife populations. The CIC has worked together with the government of Bulgaria and signed an agreement for establishing an international centre

for wildlife disease control in Bulgaria. Disease issues are often discussed at the annual general assembly of this organisation.

International Union for Conservation of Nature

The International Union for Conservation of Nature (IUCN) (www.iucn.org) was founded in 1948 as the world's first global environmental organisation. Today, it is the largest professional global conservation network and a leading authority on the environment and sustainable development.

The IUCN has more than 1,200 member organisations, including over 200 governmental organisations, more than 900 NGOs, and nearly 11,000 voluntary scientists and experts, grouped in six Commissions in some 160 countries. One of these Commissions, the Species Survival Commission (SSC), is a science-based network of more than 7,500 volunteer experts from almost every country of the world. The SSC consists of over 100 specialist groups organised according to taxonomic and subject-matter expertise. The Wildlife Health Specialist Group has roughly 350 experts involved in disease issues of wildlife worldwide.

Wildlife Conservation Society

The Wildlife Conservation Society (WCS) (www.wcs.org) is an international conservation organisation based in the United States. It was founded in 1895 with a mission to save wildlife and wild places across the globe. The organisation currently manages about 500 conservation projects in more than 60 countries, and it educates millions of visitors at the five wildlife institutions it manages in New York City (four zoos and one aquarium) on important issues affecting the planet.

The organisation addresses four of the big issues facing wildlife and wild places: climate change, natural resource exploitation, the connection between wildlife health and human health, and the sustainable development of human livelihoods.

BirdLife International

BirdLife International (www.birdlife.org) is a global partnership of conservation organisations that strives to conserve birds, their habitats, and global biodiversity by working with people towards sustainability in the use of natural resources, and it is the world's largest partnership of conservation organisations.

The organisation works to some extent with avian diseases and states on its home page that diseases can cause chronic population declines, dramatic die-offs, or reductions in the reproductive success and survival of individual birds. Diseases can even cause extinctions. Certain avian

diseases appear to be spreading to populations previously unaffected, including species already threatened by other factors. The organisation has been actively involved in work with avian influenza, avian botulism, West Nile virus and avian cholera.

The Wildlife Society

The Wildlife Society (TWS) (www.wildlife.org) is an international organisation that is headquartered in the United States. The Society currently has approximately 11,000 members, and its mission is to represent and serve the professional community of scientists, managers, educators, technicians, planners, and others who work actively to study, manage, and conserve wildlife and habitats worldwide. The Wildlife Society is committed to a world where humans and wildlife co-exist, and it works to ensure that wildlife and habitats are conserved through management actions that take into careful consideration relevant scientific information. This is accomplished by involving professional wildlife managers, disseminating information on wildlife science, advocating for effective wildlife policy and law, and building the active support of an informed citizenry.

The TWS Wildlife Diseases Working Group was founded in 2005, and it provides a forum for networking and communication among wildlife professionals (including managers, researchers, educators and administrators) interested in wildlife disease issues. The Working Group serves as a clearing house for information and expertise on wildlife diseases for TWS members, government agencies, and other professional organisations. The goals of the Working Group are to enhance awareness and understanding of research and management of wildlife diseases and of how the increased interactions between wildlife, humans, and domestic animals resulting from globalisation impact wildlife populations and human economies. The One Health concept is embraced by this group.

National or regional organisations

At a national level there are many different wildlife-related organisations that are involved in the One Health concept in one way or another. In this article the authors have selected a few as examples because they play a role today, or could be an important partner of the One Health concept in the future.

North America

American Association of Wildlife Veterinarians

The American Association of Wildlife Veterinarians (AAWV) (www.aawv.net) was founded in 1979. The objectives of this Association include: to enhance the contribution of veterinary medicine to the welfare of wildlife; to encourage and promote a philosophy of animal management and preventive medicine as it relates to free-

ranging species; to encourage the recognition of disease syndromes in their broadest sense as potentially influenced by habitat succession, alteration and pollution; to encourage cooperative efforts among resource management professionals and wildlife veterinarians; and to stress the importance of the relationships between humans, domestic animals and wildlife in disease epidemiology.

The AAWV accepts as members those who are graduates of a college of veterinary medicine and who subscribe to the AAWV objectives. Approximately 300 veterinarians are currently members, and many of them are employed by state, provincial, territorial, and federal natural resource agencies. As wildlife veterinarians they frequently operate in the arena of One Health as they address health issues that may simultaneously involve wildlife, humans, and domestic animals. The annual meetings of the AAWV are often held in conjunction with the WDA, the American Association of Zoo Veterinarians (AAZV), or TWS.

American Association of Zoo Veterinarians

The mission of the AAZV (www.aazv.org) is to optimise the health, welfare and conservation of wildlife through education, scientific study, collaboration and advocacy. The AAZV is an umbrella organisation that fosters partnerships for combined efforts for sustaining and improving the well-being of wildlife in all habitats. Its objectives include: advancing programmes for preventive medicine, husbandry, and scientific research in the field of veterinary medicine dealing with captive and free-ranging wild animals; and promoting the general welfare and conservation of captive and free-ranging wildlife. In so doing, they often address One Health issues that involve domestic animals and humans, as well as wildlife.

Boone and Crockett Club

The Boone and Crockett Club (BCC) (www.boone-crockett.org) is currently celebrating the 125th anniversary of its founding in 1887, by Theodore Roosevelt and George Bird Grinnell. The mission of the club is to promote the conservation and management of wildlife, especially big game and its habitat, to preserve and encourage hunting, and to maintain the highest ethical standards of fair chase and sportsmanship in North America. A Wildlife Health Subcommittee of the BCC's Conservation Committee addresses salient wildlife health issues, many of which involve One Health. Current examples include bovine brucellosis, a zoonosis that affects the health of livestock and currently is endemic in wild bison and wapiti in the Greater Yellowstone Area, and the potential impact of lead-based ammunition on the health of humans, wild animals and the environment. In addition, the BCC has spawned and supported several other key wildlife conservation NGOs, including the New York Zoological Society (1895), now known as WCS; the National Audubon Society (1905);

the Wildlife Management Institute (1911); the National Wildlife Federation (1937); Ducks Unlimited (1937); and the American Wildlife Conservation Partners (2000).

The BCC joined other NGOs, including the Mule Deer Foundation and the Rocky Mountain Elk Foundation, to establish the Chronic Wasting Disease (CWD) Alliance in 2002, in response to the emergence of CWD as an issue that was no longer confined to a few western states. Other NGOs, including the Wildlife Management Institute, the Quality Deer Management Association, the Pope and Young Club, and others, have joined the CWD Alliance since then. One of the greatest needs identified in 2002 was the dissemination of timely and accurate information regarding CWD to the organisation's members, the general public and the media. The CWD Alliance website, which provides one-stop shopping for up-to-date information on science, policies, regulations and other CWD-related items, was developed in 2002. Today, it remains an excellent example of the ability and willingness of hunting-oriented NGOs to step up to the plate to address issues affecting the health of wildlife resources and to keep interested members of the public informed about wildlife issues.

Southern Africa

Wildlife Ranching South Africa

Wildlife Ranching South Africa (WRSA) (www.wrsa.co.za) is the sole representative of the South African wildlife ranching industry and represents this industry on the National Wildlife Forum, a forum initiated by the Minister of Environmental Affairs and Tourism. The main function and aim of this forum is to ensure that governmental authorities and the wildlife ranching industry communicate regularly on relevant policies, in order to attain common ground and reach favourable solutions that will be supported by government and positively implemented by the wildlife ranchers.

South African Veterinary Association Wildlife Group

The South African Veterinary Association (SAVA) is a professional association of veterinarians in South Africa which promotes the interests and activities of the veterinary profession and assists veterinarians to fulfil their role in the community. The SAVAWildlife Group (www.vets4wildlife.co.za) is a specialist interest group whose aims include the following: to promote and coordinate veterinary research and all activities related to nature conservation and wildlife management in southern Africa; to provide a forum for the exchange of ideas amongst its members and members of other associations concerned with nature conservation and wildlife; and to collect, publish and distribute information related to veterinary wildlife research.

South African Hunters and Game Conservation Association

Founded in 1949, the South African Hunters and Game Conservation Association (www.sahunters.co.za) today

has more than 30,000 registered members with more than 69 branches. The Association's goal is to promote sport shooting and hunting in South Africa and provide excellent services to its members; to promote and build responsible hunting as an essential part of sustainable use and conservation; to establish and promote a positive public image of sport shooters and hunters; and to initiate and promote conservation and, by doing so, contribute to our wildlife heritage. In addition, the Association strives to provide training in the culture of responsible hunting and hunting skills and to instruct members in the proper use of hunting gear in order to improve their hunting and shooting skills.

Professional Hunters Association of South Africa

The Professional Hunters Association of South Africa (PHASA) (www.phasa.co.za) supports the conservation and ecologically sustainable development and use of natural resources for the benefit of current and future generations, through the promotion of ethical hunting (in accordance with Section 24 of the Bill of Rights of the South African Constitution). The aims and objectives of PHASA are several and include: to promote and safeguard the interests and good name of PHASA and its members; to promote and safeguard the hunting profession in South Africa; to promote and participate in the conservation of Africa's natural resources; to promote and facilitate sustainable hunting as a conservation tool; to engage with the national and provincial governments of the Republic of South Africa and other countries in all matters affecting professional hunting, conservation and related activities; to collaborate with and assist, wherever possible and to the extent reasonably feasible, all officers of organisations and authorities tasked with the conservation of natural resources; to cooperate with other persons and organisations in Africa and elsewhere having objectives similar to those of this Association and to develop fellowship and cooperation among professional hunters.

Endangered Wildlife Trust

The Endangered Wildlife Trust (EWT) (www.ewt.org) was established in 1973. Its first fundraising effort was launched when one of the founders, Clive Walker, was inspired to paint a watercolour of a cheetah, to sell 250 signed, numbered copies of this painting, and to use the money to help conserve the cheetah, which was at the time, and in some places still is, shot as vermin.

The founding vision of saving threatened species in a direct, hands-on way has never been lost. It has, however, been broadened to include other species, their habitats and ecosystems, and the role of surrounding communities and landowners. In line with this thinking, the current and ongoing objectives of EWT are to conserve endangered species and ecosystems in southern Africa by:

- initiating and funding research and conservation action programmes
- preventing species extinctions and maintaining biodiversity
- supporting sustainable natural resources management
- communicating the principles of sustainable living by developing education and awareness programmes for the broadest possible constituency for the benefit of all the people of the region
- taking a strong leadership and advocacy role in promoting environmental and social justice.

The EWT's dedicated, specialist working groups collectively coordinate over 90 projects throughout southern Africa. These groups focus on specific issues and ecosystems, ranging from saving humpback dolphins from shark nets to raising orphaned Wattled Cranes, conserving wetlands and addressing the irresponsible use of poisons and agro-chemicals.

Percy FitzPatrick Institute of Ornithology

The Percy FitzPatrick Institute of African Ornithology (affectionately known as the Fitztute) (www.fitzpatrick.uct.ac.za) is located at the University of Cape Town, South Africa, where it is housed within the Department of Biological Sciences. Situated at the tip of Africa, the Fitztute is uniquely positioned to take advantage of the vast untapped biological resources of the continent. Members of the department are committed to developing a greater understanding of these resources, through the training of scientists and the pursuit of primary research, from evolutionary ecology to conservation biology. The Institute is also home to the Niven Library, which holds what is probably Africa's most comprehensive ornithology collection and reprints of the Institute's vast publication record.

Europe

European Federation of Associations for Hunting and Conservation

The European Federation of Associations for Hunting and Conservation (FACE) (www.face-europe.org) consists of national hunting associations from 36 countries, including all 28 Member States of the European Union (EU), as well as other Council of Europe countries. The wildlife conservation issues dealt with by FACE cover the ongoing implementation of the EU Nature Directives (the Birds Directive and the Habitats Directive) in relation to species listing and new policy developments. These issues are of importance to FACE as they influence national hunting legislation and affect wildlife management. The

Federation ensures that the importance of sustainable use and incentive-driven conservation is recognised in the creation and implementation of wildlife-related policies. The Federation works together with its members to share expertise for environmental policy development and implementation to benefit hunting and conservation. This expertise is supported by a knowledge base gained through monitoring research developments and maintaining close ties with its strategic partners.

Swedish Association for Wildlife Management and Hunting

The Swedish Association for Wildlife Management and Hunting (www.jagareforbundet.se) has a long tradition (starting in 1943) of working in cooperation with the government and veterinary and medical institutions in a surveillance programme for wildlife diseases. The hunters' membership fees have provided a large part of the funding for this surveillance programme. The Association is also involved in the design of action plans for handling diseases, such as bovine tuberculosis, classical swine fever and anthrax, if they occur in Sweden in domestic and/or wild animals.

Following the outbreak of highly pathogenic avian influenza H5N1 in Europe in 2006, the Association and the National Veterinary Institute cooperated to establish a field network of observers/hunters living in Swedish coastal areas. This network has expanded and today covers most parts of Sweden. The role of the network is to report observations of diseases in wildlife and also to be active in collecting and submitting diagnostic samples to veterinary and medical institutions.

French National Wildlife Health Surveillance Network

Created in 1986 by the National Office for Wildlife and Hunting (*Office National de la Chasse et de la Faune Sauvage* – ONCFS), the National Wildlife Health Surveillance Network (*Surveillance Sanitaire Nationale de la Faune Sauvage* – SAGIR) (www.oncfs.gouv.fr) monitors the health of wildlife at the national level in France. The SAGIR network is based on a partnership between ONCFS and:

- the veterinary laboratories and medical analysis laboratories in each administrative district (*département*) of France
- the Federation of Hunters from each *département*
- the Directorate-General of Food of the Ministry of Agriculture, Food and Forests
- the specialist laboratory of the French Agency for Food Safety, Nutrition, Environment and Work in Nancy, which is responsible for capturing and processing the results obtained from all the collaborating laboratories

– the toxicology laboratory at the National Veterinary School of Lyons, and other laboratories.

Each year, more than 3,500 analyses are performed on various species (the proportion of non-game species is increasing). For the most part, the operational costs of the SAGIR network are covered by the ONCFS and the analysis costs by the local Federation of Hunters.

The main objectives of SAGIR are to monitor the health status of wildlife and the main causes of non-hunting mortality of wildlife in order to identify measures to eliminate or reduce the impact of disease, to identify eco-toxicological problems and analyse them, to disseminate information about diseases, and to promote research activities.

Australia

Australian Wildlife Health Network

The Australian Wildlife Health Network (AWHN) (www.wildlifehealth.org.au) is a not-for-profit organisation that comprises a network of government and private stakeholders across Australia. The AWHN is a national initiative of the Australian Government that links and informs people who deal with wildlife disease. It works through a network of more than 500 wildlife health professionals, members of the public, and those with an interest in wildlife health, including representatives from federal and state conservation agencies, agriculture and human health agencies, universities, zoos, private practices and wildlife rehabilitation groups, hunting industries, and diagnostic pathology services.

The AWHN's mission is to promote and facilitate collaborative links in the investigation and management of wildlife health in support of human and animal health, biodiversity and trade. The Network's vision is for a nationally integrated wildlife health system for Australia. The AWHN is complementary to existing organisations and does not duplicate their operations.

The Network has four staff members. Core funding is provided by the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF). The activities of AWHN are overseen by a Management Group that is chaired by Australia's World Animal Health Organisation (OIE) National Focal Point for Wildlife, Lyndel Post (DAFF).

In Australia there is also a zoo-based wildlife disease surveillance programme developed to incorporate disease information from free-ranging wildlife into the existing national wildlife health information system. This programme uses a collaborative, One Health approach, and provides a strong model for disease surveillance programmes for

free-ranging wildlife that improve the capacity for early detection of emerging diseases.

Which non-governmental organisations could play a role in the future?

If supported by national Veterinary Services and OIE National Focal Points for Wildlife, many of these wildlife-associated NGOs could potentially play an important role in wildlife disease surveillance.

One Health is a concept that has not yet been included or embraced by many NGOs, in their work or philosophies. However, it is obvious that there is huge potential for including many NGOs in global work in support of the One Health concept. Many of the aforementioned organisations already work with wildlife health issues and it would probably not be too complicated to involve these organisations in One Health work.

All the international organisations described above (CIC, IUCN, WCS, FACE, and BirdLife International) work in one way or another with wildlife diseases and could play a role in a future global network employing the One Health concept.

On a national level there are a few NGOs in North America, Africa, Australia and Europe that could assist and fulfil a role in the One Health concept. Many of these are hunting organisations, but there are also NGOs with an ecological perspective that are involved in the conservation and management of wildlife, or wildlife farming/ranching.

Although scientific institutions at universities and elsewhere (e.g. biological institutions, forestry and agriculture schools/institutions) cannot be referred to as NGOs, they also have immense potential to play an important role in the One Health concept.

How can the OIE and national Veterinary Services collaborate with non-governmental organisations on a national and international level?

The OIE plays a leadership role in the work with One Health and wildlife diseases. This is largely the result of

the establishment of the OIE Working Group on Wildlife, and the decision to include certain wildlife diseases among the diseases that must be reported to the OIE by Member Countries. The establishment of National Focal Points for Wildlife in OIE Member Countries has also facilitated collaboration between Veterinary Services and different NGOs, both on an international and national level.

As a global intergovernmental organisation, the OIE is ideally placed to encourage collaboration between itself, Member Countries, OIE Delegates and OIE National Focal Points for Wildlife, and different NGOs worldwide. The first step in increasing the involvement of NGOs in One

Health activities at international level is to increase their involvement at national level. This could be achieved if the National Focal Points work with their Veterinary Services to foster collaboration with NGOs and scientific institutions, and increase their involvement in national One Health projects.

Acknowledgements

The authors would like to thank Chris Bunn for valuable information from Australia.



L'importance d'une participation accrue des individus et des organisations dans les approches « Une seule santé »

T. Mörner, J. Fischer & R. Bengis

Résumé

Jusqu'à présent, rares sont les organisations non gouvernementales (ONG) participant aux opérations liées aux maladies de la faune sauvage et au concept « Une seule santé ». Néanmoins, un certain nombre d'ONG et d'institutions scientifiques d'envergure internationale ou nationale ont potentiellement les capacités de jouer un rôle important dans le renforcement des objectifs du concept « Une seule santé », en contribuant à la connaissance et aux activités de collaboration en matière de santé et de maladies de la faune sauvage. Ce potentiel s'explique par le fait que nombre d'ONG comptent parmi leurs membres des individus motivés qui prennent l'initiative de participer au versant faune sauvage du concept « Une seule santé », et cela de multiples manières. Les auteurs ont identifié six organisations internationales et dix organisations nationales susceptibles de participer utilement à ce travail. Ils recommandent que les Délégués de l'Organisation mondiale de la santé animale (OIE) et les points focaux nationaux pour la faune sauvage se mobilisent pour mettre en place des liens et une collaboration entre les Services vétérinaires (y compris les points focaux) et diverses ONG, ainsi qu'avec des institutions scientifiques nationales ou internationales.

Mots-clés

Activités des groupes de pression – Faune sauvage – Maladie – Média – Organisation non gouvernementale – Surveillance – Une seule santé – Veille.



El interés de otorgar más protagonismo a personas y organizaciones privadas en los planteamientos de «Una sola salud»

T. Mörner, J. Fischer & R. Bengis

Resumen

Son pocas las organizaciones no gubernamentales (ONG) que han participado en el trabajo sobre las enfermedades de la fauna salvaje y el concepto de «Una sola salud». Sin embargo, hay varias ONG e instituciones científicas, de ámbito internacional o nacional, que pueden desempeñar un papel importante a la hora de promover los objetivos inherentes a dicho concepto, por ejemplo contribuyendo a la salud de los animales salvajes, al conocimiento de sus enfermedades y a iniciativas conjuntas para combatirlas. Ello es así porque muchas ONG cuentan con miembros entregados, que voluntariamente intervienen, de muchas formas distintas, en los aspectos relativos a la fauna salvaje del concepto de «Una sola salud». Tras indicar seis organizaciones internacionales y diez de carácter nacional que podrían participar en esta labor, los autores recomiendan que los delegados ante la OIE y los puntos focales nacionales de la OIE para la fauna salvaje de distintos países se dediquen a establecer vínculos de trabajo y colaboración entre los Servicios Veterinarios (comprendidos los puntos focales) y diversas ONG e instituciones científicas, a escala tanto nacional como internacional.

Palabras clave

Cabildeo – Enfermedad – Fauna salvaje – Medios de comunicación – Organización no gubernamental – Seguimiento – Una sola salud – Vigilancia.



References

1. Mörner T., Obendorf D.L., Artois M. & Woodford M.H. (2002). – Surveillance and monitoring of wildlife diseases. In *Infectious diseases of wildlife: detection, diagnosis and management (Part One)* (R.G. Bengis, ed.). *Rev. sci. tech. Off. int. Epiz.*, **21** (1), 67–76.
2. Leighton F.A. (1994). – Surveillance of wild animal diseases in Europe. Report of a cooperative project between the Canadian Cooperative Wildlife Health Centre and the CNEVA (*Centre National d'Etudes Vétérinaires et Alimentaires*), Nancy, France, 88 pp.

