

**GLOBAL CONSERVATION –**

**A ONE HEALTH DVM'S PERSPECTIVES ON A PLANETARY IMPERATIVE**

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One planet. One health.

Is this important to you? It should be.

The finite resources of this big blue sphere are under increasingly heavy, in some cases unsustainable, pressure. The Doomsday Clock is ticking. Is there a so-called “tipping point”? If so, how close are we? In an age where science is under attack and falsehood is fact, what will it take to keep the life-sustaining ecosystem we call Planet Earth functioning? More importantly for this audience, with our unique training and perspectives, what can veterinarians and other animal health professionals and paraprofessionals do to help? Whether you are a hopeful pessimist or cautious optimist, this presentation will hopefully provide insights into the fascinating realm of One Health and conservation.

With this possibly alarming introduction kicking things off, let's get started.

These are contentious and dangerous times. The old curse, “May you live in interesting times”, certainly applies today, where it seems everything is polarized, politicized, and polemic. Indeed, when it comes to discussing the health of our planet terms like “preservation”, “environmental”, “conservation”, “stewardship”, and “coexistence” trigger strong emotional responses from pretty much all corners.

Setting aside differences, I'd like to suggest the following statements as the factual foundation on which everyone can agree for this presentation:

Planet earth is home – *the only home* – to people.

Some of our survival-critical resources are finite; some are renewable, or replenishable.

Many renewable resources, however, are limited in how many people they can sustain.

Humans are not the only inhabitants of Planet Earth, and some of our co-inhabitants are survival-critical to humans.

Even if everyone agrees with these unalterable truths, here's the problem: Not everyone cares!

Yes, I get it. From Ethiopia to Evaro, Montana, many of us are focused on our own day-to-day survival, caring for our families, and our next paycheck – if we are fortunate enough to even get one. In this high-pressure, ever-looming real world concepts such as the long-term prognosis for Humankind, or the

impending extinction of the beautiful and enigmatic vaquita or the regent honeyeater are abstract and distant.

How do we fix this?

First, let's loosely explain the concept of "One Health". In short, animal, environmental, and human health are all inextricably entwined. If you accept and believe this, please read on. If you don't, either go next door to the presentations on reading leukograms or managing feline diabetes, or stick with us here and perhaps change your mind.

Moving along, then...

It will sound trite, but if we are to save the planet, in essence save ourselves from ourselves, we must start with what we can control. As the saying goes, "Think globally and act locally." One need not be a Dian Fossey, Marlin Perkins, Jeff Corwin, or Jacques Cousteau to make a difference. Simple steps will help. Remember, every great oak got its start from a little nut which held its ground.

Waste less. Recycle. Turn out the lights. Turn down the heat and, if you have it, cut back on A/C. Cut back on water use and waste. Xeriscape with drought-tolerant vegetation where possible. Stop using household and lawn pesticides and herbicides. Plant or encourage wildflowers to aid insect populations. Raise bees. Avoid single-use items as much as possible. Buy in bulk to reduce packaging. Drive less. Ride a bike or walk for short errands to nearby stores or to get to and from your work. Without necessarily being a zealot, be a role model for others in this regard. Take pride and satisfaction in your efforts and let's hope that many hundreds of millions of our fellow Earthlings will do the same.

Beyond these small-scale activities, because of our unique, comprehensive training and society's respect for our profession (consistently in top 3-5 most trusted and respected), veterinarians are also well-suited to aid at larger and more impactful levels. For example, volunteer to serve as guest educator and lead classroom sessions on science, pollution, conservation, pet care, and animal husbandry and welfare.

Regarding education and outreach, social media is also a powerful tool with its ability to connect the globe with a few keystrokes.

Do you have the wherewithal and inclination to run for government office? Bless your heart if you do, and keep in mind that several veterinarians have held, or presently do, high offices in federal or state government. People generally like and trust veterinarians, so it seems we have a leg up on the competition when it comes to the voting public. As a governmental official, you have the ability to impact a wide swath of issues, likely including many that will directly or indirectly relate to the huge human footprint – making it smaller, larger, or at least more manageable.

When I speak to student groups I proudly proclaim that veterinarians have the most comprehensive and coveted biomedical education in the known universe. Our problem solving and critical thinking skills, coupled with our indefatigable thirst for knowledge and a solid foundation in biology, biochemistry, nutrition, epidemiology, infectious disease, pathology, public health, and other sciences make us

formidable researchers. It is no surprise, then, that vets can be found at all levels, from bench to boardroom, in many revered scientific institutions, agencies, and corporations.

If you have that bent, pursue it. Keep in mind that typically you'll need a PhD atop that DVM or VMD degree to be competitive in this realm.

Largely driven by the discovery and spread of chronic wasting disease (CWD), an insidious prion-based plague of wild ungulates first seen in Colorado and most prevalent still today in North America, most states and provinces now employ one or more wildlife veterinarians. These colleagues provide expansive expertise across many species groups and topics for their employers and ultimately, as public servants, society at large. Those who hear this "call of the wild" typically have firm undergraduate training in wildlife biology or management, and then pursue their DVM degree, plus or minus a MS or PhD. Keep in mind here that, as is true in the corporate world, politics and pressure to conform - to not "rock the boat" - are rife in virtually every agency. Navigating such an environment can be challenging for those with forcible, free-thinking, independent minds.

On a related note, a bill is circulating in Congress that will increase awareness and funding of wildlife and ecologically-oriented veterinarians. H. R. 2099, the Wildlife VET Act, is designed to expand the workforce of veterinarians specialized in the care and conservation of wild animals and their ecosystems, and to develop educational programs focused on wildlife and zoological veterinary medicine. This is certainly good news and further reinforcement of how respected and valued veterinarians are today.

When it comes to saving our amazing planet, service, support, contribution, and commitment need not be limited to paid positions. For those veterinarians with the passion, time, and perhaps finances to volunteer, the world literally is our oyster. We talked earlier about volunteering to educate school groups. Additionally, for any given environmental need or subject there are probably dozens of NGOs – nongovernmental organizations, often non-profit – doing good work, often on a shoestring, to help save the planet from the inexorable onslaught of humanity. A brief search of the web will unveil countless opportunities to get involved. I urge you to seek these out and, as the old ads for Schlitz beer used to say, "Go for the gusto!"

I'll close with these thoughts. First, literally from outer space (astronaut Dr. Martin Fettman) to the inner sea (marine mammal veterinarian Drs. Sam Ridgway and Frances Gulland), veterinarians shine in conservation and planetary health. All of us are part of this amazing One Health story, and all of us can and do contribute. Let's keep it up. The torch is too important to drop.

Second, make your degree and this profession work for you, not vice versa. When I talk with veterinary students I always say that if you like surgery, find a way to do surgery. If exotics turn your crank, then find a way to work with exotics. Or if the business and leadership aspects of veterinary medicine appeal to you, seek out ways to do those. The bottom line, in short, is to make your degree work for you. Not the other way around.

Finally, let's get back to basics. Growing up in the 60s and 70s I was taught not to litter. Those of you of this vintage vividly recall the moving TV advertisement that showed Native American actor Jay Silverheels weeping as he gazed upon a polluted, littered landscape. I've long maintained that as long as seemingly easy-to-solve problems like littering remain, we will never surmount much larger issues of jungle deforestation, feeding humanity, climate change, and environmental intoxication.

Judging from amount of roadside trash I continue to see each and every day, the prognosis is unfortunately bleak. But to give up is to admit failure and defeat which – when it comes to protecting our planet, ourselves, and our many co-inhabitants - is not an option.

Global conservation is not just an important goal, but an absolutely necessary one. I for one intend to die trying.

“We have met the enemy, and he is us.”

Walt Kelly (“Pogo” comic strip) 1970

<https://library.osu.edu/site/40stories/2020/01/05/we-have-met-the-enemy/>

“They paved paradise and put up a parking lot...”

Joni Mitchell 1970

<https://jonimitchell.com/music/song.cfm?id=13>

“We are one but we're not the same. We've got to carry each other...”

U2 1991