

### WILDLIFE WATCH

Killing wolves is a detriment to ecosystems

#### BY JAY MALLONEE

Avatar? It portrayed life forms as a highly interwoven network of species that interacted amongst themselves and their surroundings. Ultimately, this process was driven by a life force that had been created by these interactions, thus completing the continuous cycle of life. In other words, life had created a power much bigger than itself, which in turn sustained the entire planet.

Here on Earth, ecosystems work in a similar way, but without the Holly wood storyline and cinematographic effects. Science knows now that predators, such as wolves, help maintain the efficiency of ecosystems. From atop all food chains, predators produce far-reaching effects that ripple downward throughout the natural world and influence what diseases will be expressed, what grass species will grow, and the quality of both fresh and salt water.<sup>1</sup> This process is known as trophic cascading.

In the national forest where I live, I am immersed in this very cycle. My daily hikes take me through an almost infinite number of worlds, from the ants in the soil to the trees above them. These realms constantly change through interaction and their interface produces the very "nature" in which I walk. It turns out that through my decades of field research and living in nature, I was study -

ave you watched the movie ing the genesis of trophic cascading Avatar? It portrayed life forms before this concept became better as a highly interwoven network cies that interacted amongst but the force that helps produce them: elves and their surroundings.

#### THE FORCE

In Montana, I studied the Fishtrap wolves for almost a decade, until their destruction by wolf managers. Apparently the pack killed someone's cow. During my time with them, I found that the wolves' constant movements prevented the pack from becoming fully assembled on a regular basis. Although they were tight-knit socially, monitoring and hunting within their territory was a full-time job and the responsibilities were apparently shared by all members of the pack. They were in perpetual motion. This process leads to cascading.

Most, if not all, predator species are thought to contribute their influence throughout the worlds' ecosystems in some manner.<sup>1</sup> It begins with individuals, which in this case are the foundation of wolf packs. Their needs, wants and insatiable drive to stay alive affect everything around them. The result is an entity greater than themselves: the pack. It's a force that changes over time as the wolves react to endless environmental variations such as increasing or decreas ing prey populations, climate change or hierarchy shifts that cause social stress. In the presence of other packs, these processes are linked within

geographic regions to form networks of wolf influence over large areas.<sup>2</sup> That's the collective force that begins trophic cascading. If sustainable ecosystems are humanity's goal, then what happens to these individuals matters.

### NEW BOSS, SAME AS THE OLD BOSS?

The concept of trophic cascading is important because wolf management disrupts it via hunting seasons and control actions. This occurs by the killing of many individuals and disrupting pack functions.

On June 5, 2017, I presented some of these topics, along with my research, to the wolf coordinators at the California Department of Fish and Wildlife (CDFW). They are currently putting the final touches on a state management plan and wanted to know more about the pitfalls of wolf research. This is a legitimate concern because they will be collecting wolf population data in the future.

The subject of hunting wolves by the public came up quickly because Montana uses hunting as its primary management tool. However, Cali fornia state laws, including its own Endangered Species Act, prevent the hunting of wolves for now and well into the future. So this state is way ahead of Montana in terms of wolf conservation policies. Nevertheless, data collection remains an issue, as well as control actions that will likely be used to help solve some human-wolf conflicts, such as depredation of domesticated livestock.

Therefore, I presented studies that demonstrated the trauma that can be produced by management/hunting on individual wolves and entire packs <sup>3,4,5</sup> along with pack dynamics of the Fishtrap wolves <sup>6</sup>.

However, much of the time was spent reviewing Montana's wolf population data to demonstrate that scientific protocol was never used to obtain the numbers, which then led to false conclusions regarding the state's wolf population numbers<sup>7</sup>. Consequently, hunting quotas had been set using data that made little sense. To emphasis the point, I presented some statements made by the Montana agency biologist in my area who had helped collect the population data. At the time I was studying the Fishtrap pack. He attempted to answer my question regarding what scientific protocols were used when collecting data. He responded with, "Jay there are no protocols. No protocol would be necessary or even help really."

Such thinking has led to Montana's current policy of using hunter observations as a means of collecting "objective" data on the state's wolf population.

The California wolf managers agreed that science needed to be used and went on to describe other manage ment policies that have fallen into this trap. Scientists elsewhere also have the same issues with their governments' claim of using science, who then don't use it, but set policy anyway that is detrimental to the species they are managing<sup>8</sup>. The conclusion was that management agencies should be held to the same accountability as scientists when it comes to using science.

So the two wolf managers I talked with should be commended for wanting to know more about this issue and correcting for it. In fact, they were very open and forthcoming about everything we discussed. Therefore, it was strange to learn that the CDFW recently hired the same Montana biologist who claimed that no scientific protocols were necessary and who had collected bad data.

"What's past is prologue," I guess.

Nevertheless, the wolf managers I talked with wanted to proceed with their management in a logical, productive way. So what does that mean for trophic cascading? Unless management policies of agencies such as the CDFW take into consideration the full use of science and how ecosys tems really work, the killing of predators will continue to degrade our environment.

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3. Mallonee, J. S. and P. Joslin. 2004. Traumatic stress disorder observed in an adult wild captive wolf (Canis lupus). Journal of Applied Animal Welfare Science 7:107-126.

4. Rutledge et al. 2009. Protection from harvesting restores the natural social structure of eastern wolf packs. Biological Conservation, doi:10.1016/j.biocon.2009.10.017.

5. Bryan et al. 2014. Heavily hunted wolves have higher stress and reproductive steroids than wolves with lower hunting pressure. Functional Ecology, doi:10.1111/1365-2435.12354.

6. Mallonee, J. S. 2008. Movements of radio collared wolves and their significance on pack assembly. The Journal of American Science 4(1):53-58.

7. Mallonee, J. S. 2011. Hunting wolves in Montana - where are the data? Nature and Science 9(9):175-182.

8. Kyle et al. 2014. When science-based management isn't. Science 343:1311.

Jay Mallonee has studied a variety of animals since 1977, from wolves to whales. His research on wolves began in 1992, and he has written extensively about them in his scientific publications, magazines, newspapers and on his web site (www.wolfandwildlifestudies.com). Jay also wrote the book Timber - A Perfect Life an account of his 16-year relationship with a profound canine companion.



# CHEERS

#### WHALE SANCTUARY ON THE HORIZON

We have a humongous cheer for the Whale Sanctuary Project, which was created last year and announced recently that experts from the fields of animal protection, veterinary medicine, conservation, engineering and law are currently exploring possible locations for the world's first seaside sanctuary for orcas and belugas held in theme parks. They are looking in Washington State, British Columbia and Nova Scotia, with the goal of selecting a site by the end of this year and welcoming the first animals to the new sanctuary early in 2020.

While there are many urgent causes to support, the team involved explains the importance of this one. "Throughout history, great teachers from every culture have encouraged us to treat others as we would want to be treated in their place. By restoring to these amazing animals the ability to live their lives according to their own nature, we dignify not only them but also ourselves. We need a new, more respectful relationship with wildlife and nature if we wish to survive on Earth. Sanctuaries like this can help build that relationship." To find out more about the Whale Sanctuary Project and to subscribe to a newsletter about the project, visit whalesanctuary.org.

#### IVORY DEALERS NABBED IN NEW YORK

We have a huge cheer because two Manhattan shop owners were nabbed for illegally selling and offering for sale more than \$4.5 million in ivory.

Three years ago, New York tightened regulations meant to keep African elephants from going extinct. The new restrictions prohibit the sale of ivory except in limited circumstances, like the sale of antique musical instruments containing small amounts of ivory.

The recovered items from the store, Metropolitan Fine Arts and Antiques on West 57th St., was the largest seizure of illegal elephant ivory in New York State history. The tusks discovered at the shop were destroyed in Central Park along with a ton of other illegal ivory items on Aug. 3 in Central Park as part of World Elephant Day.

We are hoping New York will do the right thing by elephants again and pass Cecil's Law when the session reconvenes. This legislation, drafted by Friends of Animals, would ban the importation, possession, sale or transportation in New York of the African elephant, lion, leopard, and black and white rhinos or their body parts—all threatened and endangered species. New **York is the busiest port of entry for selfish, well**heeled hunters to bring back their "trophies" to hang on their walls of shame.



## JEERS

#### DAIYA SOLD TO

#### PHARMACEUTICAL CO.

A number of vegans have pledged to boycott vegan cheese brand Daiya because it was acquired by a Japanese pharmaceuti cal company if the sale is not reversed. We couldn't agree more.



Otsuka is a known pharma -

ceutical and nutraceutical company that uses animals in its laboratory testing, as well as in its research and development, so this partnership is jeer-worthy.

Daiya claims that its products attract a wide range of consumers, appealing to those with high health consciousness, as well as vegans, vegetarians and consumers with food allergies and intolerances. They can scratch vegans from that list.

Instead of supporting Daiya, why not make your own vegan cheese or purchase another brand. We recommend Miyoko Schinner's The Homemade Vegan Pantry: The Art of Making Your Own Staples (10 Speed Press; \$22.99). Inside, there are recipes for soy milk, mayo, jams, mustards, sauces, butter, several differ ent kinds of cheese, stocks, homemade tofu, des serts...and that's just the tip of the vegan iceberg. Miyoko's cheese is sold online and at Whole Foods.

#### VERMONT APPEASES THE PUPPY MILL INDUSTRY

What is the acceptable level of suffering and animal abuse? There is none—and that's why we have a jeer for Vermont Governor Phillip Scott, who signed a Humane Society of the United States-backed bill into law that reduces the cage space allocated to many dogs in puppy mills.

You can't regulate atrocities, and we'd like to see legislation passed that would reduce the number of puppy mills to zero in Vermont, not reduce cage size. What's shocking to us is that the Humane Society of the United States, which fundraises based on the idea that it opposes puppy mills, as well as some Vermont humane societies, supported this bill.

Reducing cages sizes used at Vermont puppy mills, and removing the requirement for a house for dogs that "guard livestock" will most certainly create more suffering and death. Dogs die in the blazing sun and freeze to death in our frigid winters without protection because dogs, like any mammal, are sus ceptible to frostbite and hypothermia. Shame on Gov. Scott!

