

Educational Guide

# THE GHOSTS IN OUR MACHINE

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This Educational Guide is a free digital download intended for a cross-section of educators, learners and audiences who wish to further their understanding of *The Ghosts In Our Machine* documentary and the issues it raises.

Recommended for grade levels: 8 - 12,  
College, University, Adults.





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01

# INTRODUCTION TO ANIMAL ADVOCACY - ADVANCED

## RELIGION, PHILOSOPHY, SCIENCE, LAW, AND ACTIVISM

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The modern animal advocacy movement has a long history. Many people are surprised to learn that people in previous historical eras participated in anti-vivisection campaigns and adopted vegetarian diets for ethical reasons. Legal efforts to stop cruelty to animals can be traced back to the ground-breaking 1822 “Cruel Treatment of Cattle Act” in Britain.<sup>1</sup> This law was the first modern anti-cruelty law, and is often referred to as “Martin’s Act” in honor of Richard Martin, the politician who introduced it. The Royal Society for the Prevention of Cruelty to Animals (RSPCA) was founded two years later, in 1824. There were isolated laws regarding the treatment of animals in the U.S. colonies before the American Revolution, and animal protection societies like the American Society for the Prevention of Cruelty to Animals (ASPCA) were founded in the second half of the nineteenth century.

Until relatively recently, animal advocacy tended to be mostly concerned with mitigating the worst abuses, but not with questioning the moral basis of using animals in the human economic machine. Peter Singer's *Animal Liberation*, published in 1975, started a re-examination of human-animal relations that eventually rippled through academia and, more significantly, nudged popular consciousness. The book launched a contemporary justice movement, and, in tandem with environmentalism, picked up speed, crossing continents.

Today hardly a news cycle fades away without mention of an animal issue, rescue story, or an unlikely and heart-warming bond: a giraffe kissing a terminally ill zookeeper goodbye, a baby deer “adopted” by a sanctuary tiger, a polar bear in mourning. Undercover footage of cruelty towards farmed animals makes prime time news in Europe, Australia, and in North America. Gene Baur, co-founder of Farm Sanctuary, has been among the major cultural figures highlighted by Time magazine in the “10 Questions” section that appears in each issue.<sup>2</sup> The Party for the Animals holds seats in the parliament of the Netherlands. Kenya, South Africa, and Ethiopia anchor efforts on behalf of domesticated and wild animals on the African continent. Brazil leads South America in the variety and vitality of its initiatives for non-human animals, and Bolivia was the first country in the world to ban the use of both domestic and wild animals in circuses.<sup>3</sup> In 2013, India declared that dolphins are “non-human persons,” and, as such, they can not be held in captivity.<sup>4</sup> Domestic and international conferences and symposia on animals, humans, and society take place every month of the year. A web of new visions for human-animal relationships is growing around the globe, often propelled by youth, and framed by the dynamic growth of advocacy, academic programs in critical animal studies, and animal law. Grassroots animal protection groups exist in most countries, and international organizations such as Humane Society International (HSI), The Humane Society of the United States (HSUS), and People for the Ethical Treatment of Animals (PETA) maintain membership in the millions.

All justice movements encounter tremendous resistance as they break through inertia and establish new norms in human society. As Martin Luther King stated so eloquently, “the arc of the moral universe is long, but it bends towards justice.” The rights movements of recent times have accelerated in developmental tempo and pushed each other forward, almost in chain reaction.

Is humanity ready now to face the ghosts in our modern economic machine?



# RELIGION AND THE EVOLVING STORY OF DESCARTES AND DARWIN (AND THE TITLE OF A TIMELY DOCUMENTARY CALLED THE GHOSTS IN OUR MACHINE)

Mathematician/philosopher Rene Descartes (1596-1650) is, perhaps, best remembered for his theory of mind-body dualism. In this theory, the soul was understood to be a separate entity dwelling in but not a part of the physical machine of the human body. Descartes concluded that non-human animals are merely automata, living machines that lack thought and awareness. For example, according to Descartes, if a cat screams while her tail is being cut, this would be an automatic, machine-like response, no more significant than the noise a buzzer makes when pressed. This worldview removes any obligation to consider pain and suffering experienced by non-human animals.

The phrase “Ghost in the Machine” was coined in 1949 by philosopher Gilbert Ryle in his criticism of Descartes’ theory of mind/body dualism.<sup>5</sup> In the first chapter of *The Concept of Mind* Ryle writes,

The official doctrine, which hails chiefly from Descartes, is something like this....every human being has both a body and a mind. Some would prefer to say that every human being is both a body and a mind. His body and his mind are ordinarily harnessed together, but after the death of the body his mind may continue to exist and function.<sup>6</sup>

The two entities, body and mind, co-exist during an individual person’s lifetime, but are separate from each other. The spirit, or ghost, inhabits the machine of the body. One can imagine that Descartes would have classified a non-human animal as a machine without a ghost.

Director Liz Marshall saw something inspiring in that evocative image: the invisible animals humans use and choose not to see are the ghosts.

*“In 2010, I was seeking a powerful conceptual title for the documentary I was developing. I attended a lecture by Canadian novelist and naturalist Graeme Gibson, who referred to nature as the ‘ghost’, to illustrate our human infringement on the natural world. This sparked an immediate connection. I mulled it over, played with some variations on the common phrase “Ghost in the Machine”, and decided to create a self-reflexive title, to prompt*

*people to turn their gaze inward. It is our machine. From food, fashion, entertainment, product testing and biomedical research, the Ghosts are the billions of invisible animals bred and used within global consumer industries. We are complicit in a flawed system, and it's up to each of us to change it."*  
 - Liz Marshall, Director, *The Ghosts In Our Machine*.

*"The Ghosts in Our Machine" ...[is] a brilliant metaphor for capturing the idea that animals are ubiquitous but invisible members of the community: essential to its functioning; the creators of its wealth; utterly governed and regulated by its laws and policies; and tyrannized by complete absence from political representation or participation. - Professor Will Kymlicka*

Descartes' theories were grounded in earlier Judeo Christian and Greco Roman traditions that regarded humanity as the central focus of God's attention and as the shining crown of the Great Chain of Being, a concept rooted in Aristotle's scala naturae.<sup>7</sup> Both traditions incorporate a viewpoint that some now call "human exceptionalism," the belief that humans are in a completely separate category from non-human animals. In the 19th century Charles Darwin famously took issue with that conviction. His writings exploring the commonalities between species, of course, were highly controversial.<sup>8</sup> As Darwin's writings elaborated, common evolutionary heritage meant that humans and other animals shared significant adaptations and capacities. Today, an accelerating stream of scientific data confirms that non-human animals are also sentient beings.<sup>9</sup>

The worldview of human exceptionalism promotes the belief that other animals were put on Earth for human use, and this has historically been justified through religious doctrines. There are small groups within denominations that encourage vegetarianism and a care-based sense of human responsibility towards non-human animals that is enshrined in a benevolent interpretation of "dominion," a belief that animals should be protected, not ruthlessly dominated and exploited. For example, Archbishop Desmond Tutu and the presiding bishop of the Evangelical Lutheran Church have recently made statements that place more emphasis on care for animals,<sup>10</sup> and Jewish activists are re-examining Kosher slaughter in light of the scriptural admonitions against causing animals unnecessary suffering.<sup>11</sup> Imam Nur (Noor) Salie of Cape Town reminds Muslims of their responsibilities to the natural world and to animals: "Cruelty to living creatures is absolutely forbidden. A variety of stories and anecdotes exist in Islamic teachings regarding the evil of those who mistreated animals, and the virtue of those who went out of their way to demonstrate kindness to animals."<sup>12</sup> However, these developments stop short of enjoining the sacrifice of animals for human use.

Several Eastern spiritual traditions promote vegetarianism, particularly Jainism, whose adherents follow a strict and comprehensive code of nonviolence, or ahimsa, and Buddhists of the Mahayana tradition. One of the most influential Buddhist leaders is Zen Master Thich Nhat Hahn, who is also known as “The Other Dalai Lama,” or “the Father of Mindfulness.”<sup>13</sup> The communities Thich Nhat Hahn established practice veganism with “...the intention of nourishing our compassion towards the animals.... Being vegetarian here means that we do not consume dairy or egg products because they are products of the meat industry.”<sup>14</sup>

The Dali Lama himself speaks out on behalf of chickens and other animals.<sup>15</sup> On World Compassion Day in 2012, His Holiness said, “I was not vegetarian till about five decades ago, but when I saw hens being abused on an animal farm, I decided to become vegetarian...” As one report of this event noted, “when a student asked him for his views on meat, the 77-year-old said with a smile: ‘A vegetarian diet is the most healthy one for you. We must respect all forms of life.’”<sup>16</sup>

Hindu India maintains the traditional concept of cows as sacred animals, and for the faithful, it is taboo to kill them.<sup>17</sup> As Arvind Sharma of McGill University in Montreal explains, “In Western thought the distinction between the animal and the human is maximized, whereas in Hindu thought it is minimized.”<sup>18</sup> In practice, however, India’s venerated cows are often abused, and turned over to non-Hindus for slaughter.<sup>19</sup> Animals are exploited in every culture and under the aegis of every major religion.



“I truly believe that it’s innate that we’re all compassionate, and if we’re given the opportunity to care, we will.”

- Jo-Anne McArthur, *The Ghosts In Our Machine*



# ANIMAL PROTECTION: IMPROVING WELFARE AND GRANTING FUNDAMENTAL RIGHTS

The overarching question explored in *The Ghosts In Our Machine* documentary is: **Are non-human animals property to be owned and used, or are they sentient beings deserving of rights?**

Part of the general awakening to the demonstrated reality of animal sentience has been a change in laws and statutes in many parts of the world. Individual lawyers and groups have pushed for expanded interpretations of existing legislation, and have sought to break new legal ground for animals. Relevant institutions have begun to change their policies regarding non-humans animals. These changes in official codes help to shift attitudes, which, in turn, results in further progress in law and policy.

The realization that other animals are conscious and cognitively complex has led to increasing demands to protect them from suffering. This frequently takes the form of more stringent welfare requirements. For example, in 1997 the European Union declared in the Treaty of Amsterdam that animals are sentient beings, but that they are still considered human property. A specific directive to improve welfare followed in the Treaty of Lisbon in 2009.<sup>20</sup>

The Swiss have some of the strongest animal welfare laws in the world.<sup>21</sup> Due to the efforts of individual advocates such as the former animal lawyer for the canton of Zurich, Antoine Goetschel, in Switzerland, animals are classified as “creatures of dignity,” deserving of more protections than items of property, such as chalets or computers.<sup>22</sup> Joyce Tischler, the founder of the Animal Legal Defense Fund, cites Professor David Favre’s concept of “living property” as a middle ground classification for nonhuman animals.<sup>23</sup> Increased requirements for maintaining animal welfare would flow from this status, although it has not been accepted by any U.S. court.

Even the best welfare standards fail to address the basic question that is raised by expanding knowledge of animal consciousness, namely does proof of sentience and mental and emotional capacity entitle animals to basic rights?

The Cambridge Declaration on Consciousness in Non-Human Animals, written by a highly regarded group of scientists and made public in July of 2012, was a further spur to initiatives seeking increased protection for animals.<sup>24</sup>

## SOMEONE, NOT SOMETHING

By Dr. Lori Marino, Ph.D., and Bruce Friedrich

Many people see two classes of animals—with pets deserving status as family members, and other animals valuable only as food, entertainment, clothing, and so on. But farm animals are not different in any morally relevant way from other animals. They are made of flesh, bone, and blood—just like dogs, cats, and humans. And they have the same five physiological senses that we do, and they feel pain in the same way, and to the same degree.

Plus, scientists who study farm animals and fish tell us that they have complex behavioral aptitudes, sophisticated cognition, and a well-developed capacity for empathy. In her introduction to *The Inner World of Farm Animals*, primatologist Dr. Jane Goodall writes that “farm animals feel pleasure and sadness, excitement and resentment, depression, fear, and pain. They are far more aware and intelligent than we ever imagined...they are individuals in their own right.”<sup>1</sup>

As just a few examples:

Pigs play video games as adeptly as dogs or chimpanzees and also know how mirrors work. Dr. Stanley Curtis worked with pigs at Penn State University, and he believes that “pigs could be as smart as chimpanzees and other nonhuman primates.”<sup>2</sup> Additionally, as scientist Dr. Mike Mendl notes, “pigs can develop quite sophisticated social competitive behavior, similar to that seen in some primate species.”<sup>3</sup>

Chickens can delay gratification and know that hidden objects still exist, both of which indicate complex thought processes. As a recent study noted, “Chickens do not just live in the present but can anticipate the future and demonstrate self-control... something previously attributed only to humans and other primates.”<sup>4</sup> Chris Evans, an Australian animal scientist, agrees and notes that, “as a trick at conferences, I sometimes list these attributes, without mentioning chickens, and people think I’m talking about monkeys.”<sup>5</sup>

Cows interact with one another in complex ways, forming collaborative relationships, learning from one another, and making decisions based on altruism and compassion. Because of their complex social lives, they are also quite intelligent. Professor Donald Broom from Cambridge University argues that “social animals such as cattle... need substantial intellectual ability in order to cope with their complex social life.”<sup>6</sup>

Professor Broom explains that when cows solve problems, “their brainwaves showed their excitement; their heartbeat went up, and some even jumped into the air. We called it their Eureka moment.”<sup>7</sup>

Mother goats can recognize the vocalizations of their kids and distinguish them from other familiar goats long after weaning and for at least one year. Goats are also very fast learners and can remember a complex task for several months after learning it.<sup>8</sup>

Fish, too, although they operate underwater, are more like humans than they are different from us. Writing in *New Scientist*, Professor Culum Brown explains: “In many areas, such as memory, their cognitive powers match or exceed those of ‘higher’ vertebrates, including non-human primates. Best of all, given the central place memory plays in intelligence and social structures, fish not only recognize individuals but can also keep track of complex social relationships.”<sup>9</sup>

And scientists have barely scratched the surface of who farm animals are and what they are capable of, which is why Farm Sanctuary and the Kimmela Center for Animal Advocacy are working together on “the Someone Project,” which will distill all existing research on the complex ethological lives of farm animals and fish, and will sponsor and publicize new work.

As Dr. Joe Stookey, Professor of Animal Behavior at the University of Saskatchewan, has noted: “Whenever scientists do projects on any animal species to better understand their cognitive abilities, emotions, memory, etc., almost inevitably, we are more awed by their abilities when the results finally come in. . . . [W]e are still a long way from understanding how animals think, how much and how long they remember, how they learn, etc.”<sup>10</sup> That’s true, but the Someone Project aims to find out.

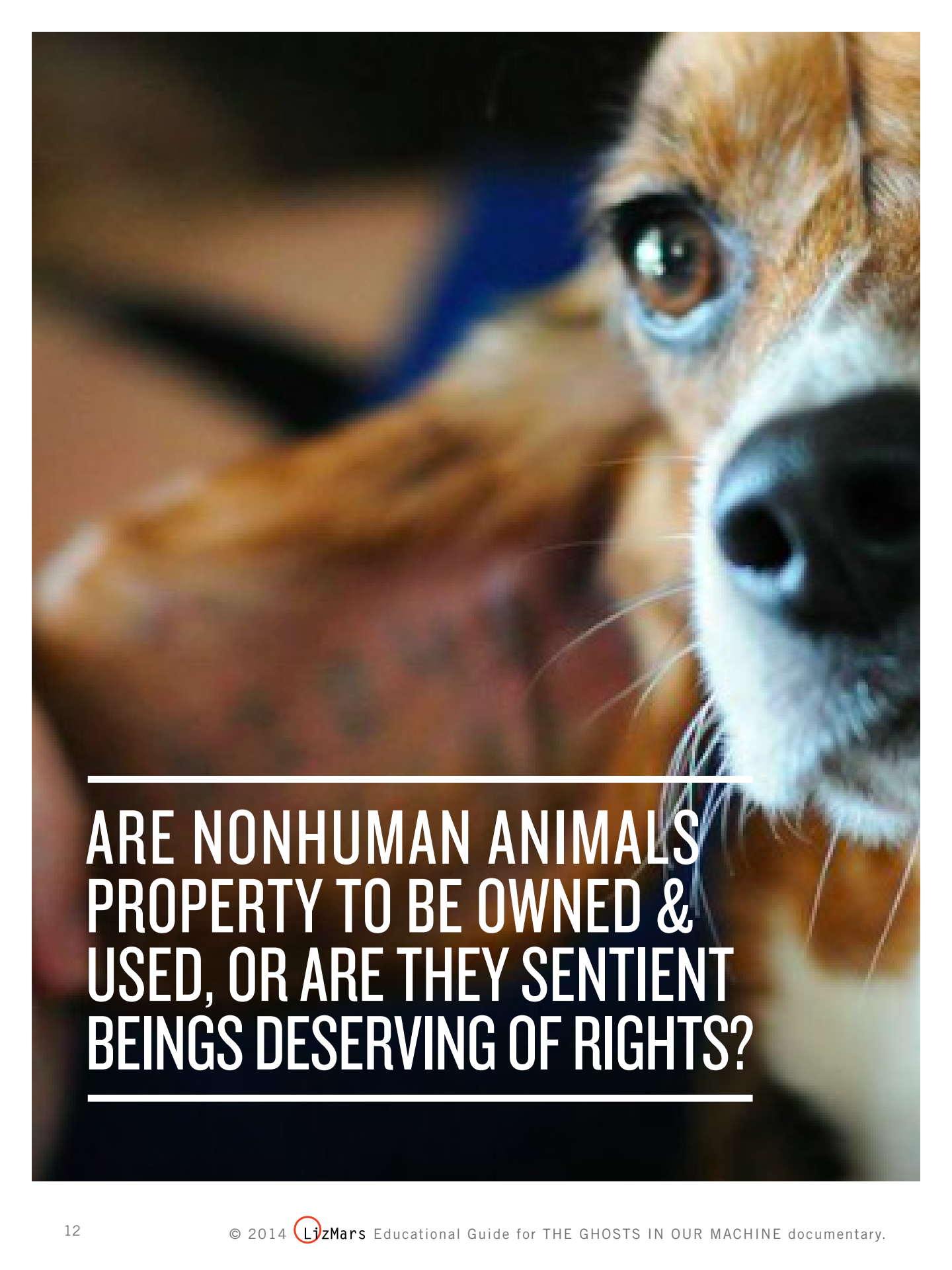
*Dr. Lori Marino is a neuroscientist and expert in animal behavior and intelligence, and the Founder and Executive Director of the Kimmela Center for Animal Advocacy.*

*Bruce Friedrich leads Farm Sanctuary’s policy and litigation efforts and works to introduce the world to who farm animals are as individuals through the Someone, Not Something project, which is his brainchild.*



### Notes (Marino and Friedrich)

1. Jane Goodall, "Introduction", in *The Inner World of Farm Animals: Their Amazing Social, Emotional, and Intellectual Capabilities* by Amy Hatkoff (New York: Stewart, Tabori and Chang, 2009), 12-13.
2. Miguel Helft, "Pig Video Arcades Critique Life in the Pen," *Wired Magazine* (online edition, June 6, 1997), [archive.wired.com/science/discoveries/news/1997/06/4302](http://archive.wired.com/science/discoveries/news/1997/06/4302)
3. Bootie Cosgrove-Mather, "Farm Animals Not So Dumb," *Reuters News Service* (Sept. 11, 2002), [cbsnews.com/news/farm-animals-not-so-dumb/](http://cbsnews.com/news/farm-animals-not-so-dumb/)
4. Rossella Lorenzi, "Study: Chickens think about future," *Animal Planet News*, July 14, 2005.
5. William Grimes, "If chickens are so smart, why aren't they eating us?" *The New York Times* (Jan. 12, 2003), [nytimes.com/2003/01/12/weekinreview/if-chickens-are-so-smart-why-aren-t-they-eating-us.html](http://nytimes.com/2003/01/12/weekinreview/if-chickens-are-so-smart-why-aren-t-they-eating-us.html)
6. Hatkoff, *The Inner World of Farm Animals*, 64.
7. Jonathan Leake, "The Secret Life of Moody Cows," *The Sunday Times* (Feb. 27, 2005) [thesundaytimes.co.uk/sto/news/uk\\_news/article100199.ece](http://thesundaytimes.co.uk/sto/news/uk_news/article100199.ece)
8. Elodie F. Briefer, Samaah Haque, Luigi Baciadonna, and Alan G. McElligott, "Goats excel at learning and remembering a highly novel cognitive task," *Frontiers in Zoology* Vol 11 no. 20 (March 2014) [frontiersinzoology.com/content/11/1/20](http://frontiersinzoology.com/content/11/1/20)
9. Culum Brown, "Animal minds: Not just a pretty face," *New Scientist* (June 12, 2004) [newscientist.com/article/mg18224515.200-animal-minds-not-just-a-pretty-face.html](http://newscientist.com/article/mg18224515.200-animal-minds-not-just-a-pretty-face.html)
10. Personal email to Bruce Friedrich, March 14, 2012, quoted with permission.

A close-up, shallow depth-of-field photograph of a dog's face, likely a pit bull mix, with brown and white fur. The dog's eye is visible, looking towards the camera. The background is blurred.

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**ARE NONHUMAN ANIMALS  
PROPERTY TO BE OWNED &  
USED, OR ARE THEY SENTIENT  
BEINGS DESERVING OF RIGHTS?**

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## PROPERTY OR SENTIENT?

By Anna Pippus

Director of Farmed Animal Advocacy, Animal Justice Canada

**PROPERTY:** Clothes, cars, houses, books, computers, and cell phones are examples of property. Animals, too, are considered property under the law. Like objects, animals are commodified in global industries such as food and clothing farming, bio-medical research and product testing, and entertainment. Animal's status as property works against them in legal systems around the world. For example, in Canada, laws against criminal animal cruelty appear under the title "Willful and Forbidden Acts in Respect of Certain Property"<sup>1</sup>. This suggests that harming an animal is wrong because it is damaging someone's property. As property, non human animals receive very limited protection. Their interests, no matter how fundamental, are subordinate to even the most trivial human interests. In 1999, Gary Yourofsky freed fifteen hundred minks from a filthy, decrepit fur factory. Instead of being applauded as a hero for rescuing the miserable animals, Yourofsky was prosecuted for theft of the minks and ordered to pay restitution to the owner<sup>2</sup>. The suffering of the minks was rendered lawfully invisible through laws protecting their owners. Criminal laws against cruelty only identify acts as criminal offences if they cause 'unnecessary suffering' to animals<sup>3, 4</sup>, which means that some suffering is considered necessary.

1. Government of Canada. Criminal Code of Canada.
2. R. v. Yourofsky[1999] O.J. No. 1901 (Ont. Sup. Ct).
3. UK Animal Welfare Act 2006. Provision of Unnecessary Suffering.
4. Animal Legal & Historical Center. European Convention for the Protection of Pets. Animals: Summary



**SENTIENCE:** Sentient beings feel pleasure, pain, fear and attachment. Biologically, sentient beings have a nervous system, which allows them to innately experience these feelings. Sentient creatures will seek pleasure, will react to fear, and most significantly, avoid suffering and pain in order to live. Activists have long pressed for laws that recognize non human animals as sentient beings and give them status in the legal system. Although some laws do exist to protect animals, animals are unable to have representatives go to court on their behalf to advocate for their interests under the law. Some humans (such as children, mentally incapacitated individuals, and even classes of people) as well as entities (such as corporations and trusts) can have their interests represented in court by a representative. It makes logical sense that as sentient beings, animals should be afforded this same privilege. In Canada, animal advocates went to court for a declaration that the City of Edmonton was in violation of animal welfare laws for inadequately housing a lone, unhealthy elephant. Instead of considering the merits of the case, the court ruled the application was an abuse of process: the elephants could not have representatives come to court to advocate for her legal interests. However, on appeal, in a lengthy dissent, the chief justice would have granted standing and allowed the litigants “to speak for animals whose voices are not otherwise audible to the law.”<sup>1</sup> Similarly, in the United States, the Nonhuman Rights Project aims to change the common law status of nonhuman animals from mere “things” to “persons” by going to court and arguing for them. Their first lawsuits were filed in 2013.<sup>2</sup>

1. Reece v. Edmonton (City), 2011 ABCA 238.
2. Nonhuman Rights Project, “Mission, Goals and Values.”

## LAWYERS FOR ANIMALS

Groups of lawyers around the world are aiming to secure basic legal standing, or “personhood,” for animals. Legal personhood has a complex history--it is not limited to humans and it has been bestowed on corporations. Historically, women, African-Americans, and other groups of humans have been denied legal personhood, and have valiantly fought to gain that status. New ground was broken when the Indian government recently made dolphinariums illegal, deciding that “dolphins should be seen as ‘non-human persons’ and as such should have their own specific rights.”<sup>25</sup>

The following three animal law organizations demonstrate the scope of work being done to advance the legal interests of non-human animals:

The Animal Legal Defense Fund (ALDF) was founded in 1979 by lawyers who were involved in constructing the emerging field of animal law.

Its founder, Joyce Tischler, is known as “The Mother of Animal Law.” The ALDF’s mission is to protect the lives of non-human animals and to advance their interests through the legal system. As Tischler explains:

“In order to ‘protect the lives’ of animals, we work to strengthen and increase enforcement of existing animal protection laws, and we creatively use legal strategies to alleviate the most egregious animal suffering. To ‘advance the interests’ of animals, ALDF advocates reform of the legal system to recognize the true, sentient nature of nonhuman animals, so that their interests are adequately protected under the law.”

“I’m convinced that animal rights and human rights work together. If we had been having this conversation 200 years ago and we had been talking about slavery or suffrage, people would argue, women will never have a say in governance, and they would have argued that it’s natural for humans to hold other humans as slaves.”

- Bruce Friedrich, *The Ghosts In Our Machine*

## THE LEGAL STATUS OF ANIMALS AS PROPERTY

By Joyce Tischler

Founder, General Counsel, Animal Legal Defense Fund

In the United States, legal “persons” are not just human beings--corporations, ships, and trusts are also classified as “persons.” As such, they enjoy certain rights, including the right to file a lawsuit. Non-human animals, on the other hand, are classified as personal property. Like automobiles, furniture, or jewelry, they can be purchased, sold, transferred, and “destroyed” at the discretion of the “person” who holds their legal title.

Classifying animals as personal property ignores the fact that they are alive and that they feel pain, fear, joy, and a variety of other emotions. Some laws, such as state criminal anti-cruelty provisions, acknowledge that animals are a unique form of property. Anti-cruelty laws mandate that animals be treated differently from inanimate property and protected from unnecessary suffering. One can be convicted of cruelty to a cat, but not to an automobile. Even so, cruelty and abuse of animals, both on an individual and institutional level, remains rampant in our society.

Laws are made and changed by humans, and currently Americans are not in agreement about how nonhuman animals should be viewed and treated by the legal system. We frequently encounter issues that suggest the law should treat animals differently than inanimate personal property.

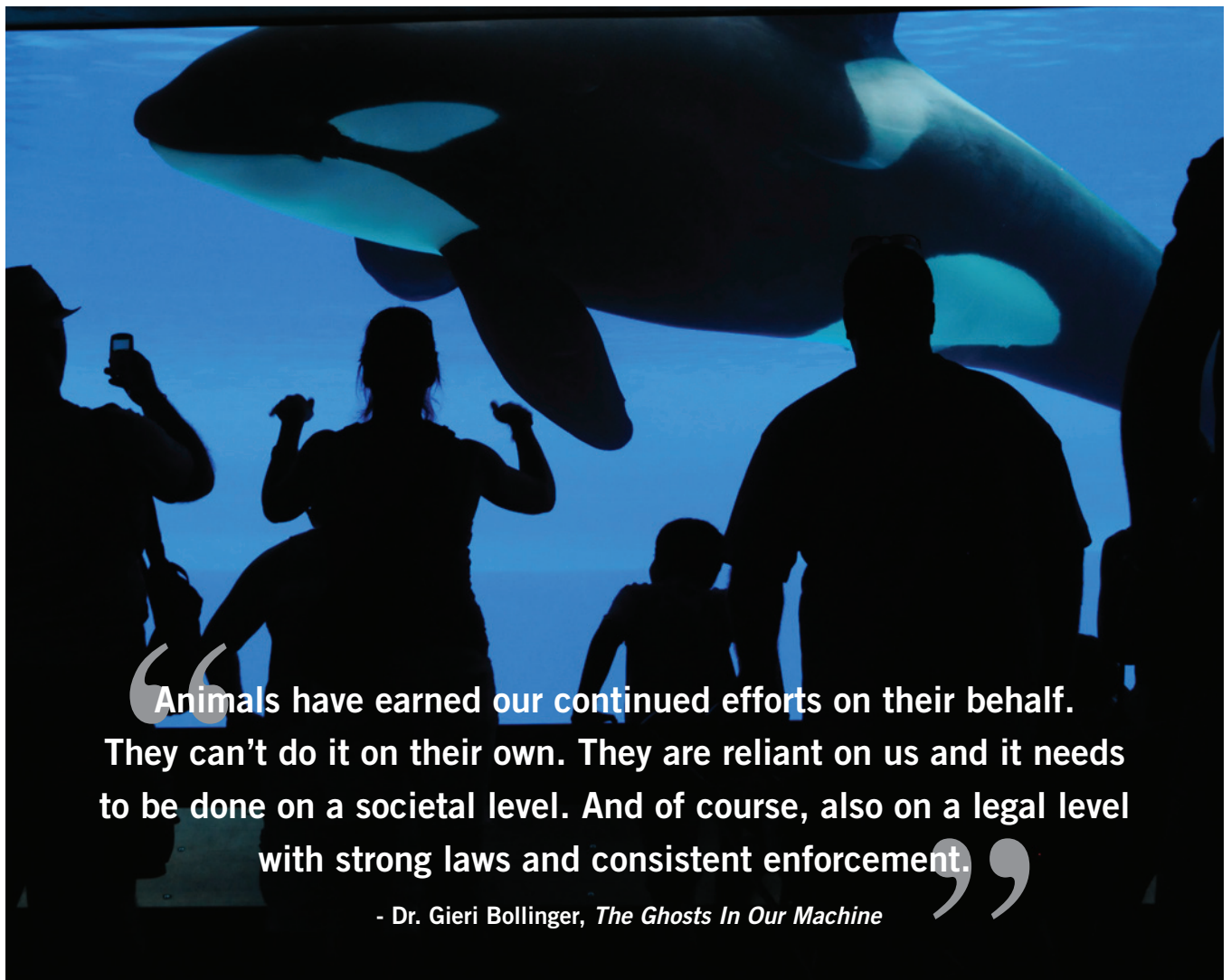
For instance, if your neighbor shoots and injures your beloved mixed breed dog and you sue the neighbor for damages, what is the proper measure of damages? Is it the cost to replace or “repair” the dog, the “sentimental value” of the dog to you, or some third measure that recognizes the dog’s pain and suffering? Since animals are property, most courts will only allow you to sue for the “replacement value,” which, with a rescue dog, might be little more than twenty dollars.

If a married couple divorces and both parties want to have sole custody of their cat, how should a judge decide the case? Is the cat just another asset to be given to one party or the other, or should the cat’s interests be taken into consideration? Too often the cat’s interests or welfare will never be considered by the court.



Should chimpanzees, with whom we share over 98% of our DNA, be treated as legal persons, or should they continue to be the personal property of others? American judges are grappling with these and other issues relevant to animals.

Industries that profit from the many ways humans use animals—as food, clothing, entertainment (circuses, zoos, movies), and tools for medical research and testing—want to retain the status quo. This tug of war is most clearly played out in the emerging field of animal law, and the answers are, as yet, unwritten.



**“Animals have earned our continued efforts on their behalf. They can’t do it on their own. They are reliant on us and it needs to be done on a societal level. And of course, also on a legal level with strong laws and consistent enforcement.”**

**- Dr. Gieri Bollinger, *The Ghosts In Our Machine***

U.S. lawyer Steven Wise founded the Nonhuman Rights Project (NhRP) in 2007. The Board of Directors includes several prominent people such as Jane Goodall. Using the evolving standards of common law, the project seeks to endow several groups of animals with basic rights suitable to their lives, these being bodily liberty and bodily integrity.

**Excerpt from the Nonhuman Rights Project website:**

Bodily liberty means not being held in captivity. For a chimpanzee, it means not spending life in a laboratory; for an elephant, it means not being chained in a circus; for a whale it means not being imprisoned in a zoo or park.

Bodily integrity means not being touched without consent or in one's best interests. For a chimpanzee, it means not being subjected to biomedical research. For an elephant it means not being beaten at a circus. For a whale it means not being forcibly inseminated to make her pregnant. Do not confuse these fundamental rights of nonhuman animals with so-called "human rights."

Human rights are for humans. Chimpanzee rights are for chimpanzees. Dolphin rights are for dolphins. Elephant rights are for elephants ... The Nonhuman Rights Project is the only organization working toward actual LEGAL rights for members of species other than our own. Our mission is to change the common law status of at least some nonhuman animals from mere "things," which lack the capacity to possess any legal right, to "persons," who possess such fundamental rights as bodily integrity and bodily liberty, and those other legal rights to which evolving standards of morality, scientific discovery, and human experience entitle them.

Lawyer and Animal Law and Ethics Consultant Antoine Goetschel served as the official lawyer representing animals in the canton of Zurich, Switzerland (CH) from 2007 until the office was abolished in 2011. This followed on the heels of the defeat of a referendum he had backed to appoint lawyers for animals in every Swiss canton. Goetschel lectures, writes, and advocates globally for the rights of animals. He is the founder of the Global Animal Law Project (GAL).

## GLOBAL ANIMAL LAW (GAL)

By Antoine F. Goetschel

President, Lawyer

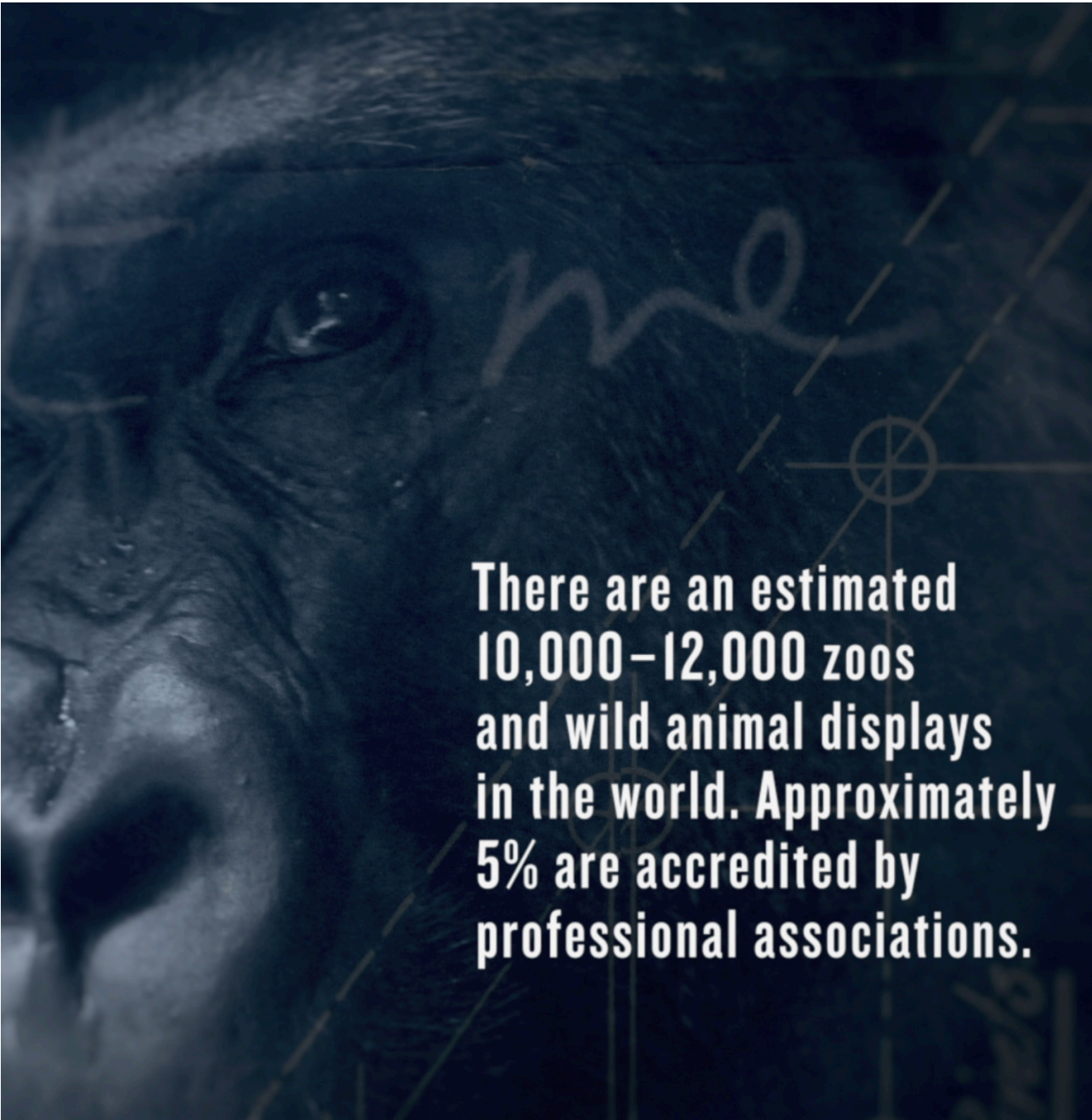
International Animal Law and Ethics Consultant

Giving animals standing as a legal entity located somewhere between inanimate objects and humans has actually happened in some legislative bodies. It has subsequently shifted the attitudes of the public towards non-human animals in a lasting way. And when animals are protected by district/state or national bodies of law, the balance between fundamental rights of humans and the interests of animals is more just. Giving animals a voice in criminal procedures, as I legally could for several years in the Swiss Canton of Zurich, dramatically changed the numbers of animal cases, the seriousness of the investigation of charges, and the amount of the fines over the years. All these legal instruments that have worked very well for progress towards animals are described at: [www.globalanimallaw.org](http://www.globalanimallaw.org).

The goal and aim of the Global Animal Law Project is to create a new framework for the global discussion on animal law. The GAL MATRIX has therefore been created. It contains our proposals on what can and should be followed and aspired to in the fields of drafting and enforcing laws to protect animals, improving the conditions of their lives, and educating the public and governmental officials. These actions should apply from the local to the global level, and from incremental and short-term goals to utopian visions. A utopian model or paradigm can energize advocates as they plan campaigns to move towards a better reality from today's conditions.

Membership in GAL's Global Animal Law Expert Group is extended to all animal lawyers, from students to professors.



A close-up, dark, and grainy image of a tiger's face, focusing on its eye and nose. A faint grid pattern is overlaid on the image, with a crosshair centered near the tiger's eye.

**There are an estimated  
10,000–12,000 zoos  
and wild animal displays  
in the world. Approximately  
5% are accredited by  
professional associations.**



**THEGHOSTSINOURMACHINE.COM**





## 02

# INTRODUCTION TO ANIMAL ADVOCACY – SUMMARY

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The modern animal advocacy movement has a long history. Many people are surprised to learn that people in previous historical eras protested against experiments done on animals and adopted vegetarian diets for ethical reasons. The first “anti-cruelty” law was introduced in Britain in 1822, and two years later the Royal Society for the Prevention of Cruelty to Animals (RSPCA) was formed in that country. There were isolated laws regarding the treatment of animals in the U.S. colonies before the American Revolution, and animal protection societies like the American Society for the Prevention of Cruelty to Animals (ASPCA) were founded in the second half of the nineteenth century.

Today animal stories are all over the news and in the media. There is increased political interest in animals, and with each passing year, there are new legal and cultural developments that help make the world a kinder, gentler place for all species. For example, in 2013, India declared that dolphins are “non-human persons,” and, as such, they can not be held in captivity. Grassroots animal protection groups exist in most countries, and international organizations such as Humane Society International (HSI), The Humane Society of the United States (HSUS), and People for the Ethical Treatment of Animals (PETA) maintain membership in the millions.

We are also learning more about how animals think and feel, and that their emotions and their ways of thinking are not all that different from our own. For example, did you know that pigs are pretty good at video games and that cows form close friendships with one another? This type of information requires us to rethink some of the assumptions we have long held about animals. It may even require us to change some of our behavior.


In the past, previous social justice movements have helped pave the way for rights and protection for many marginalized groups of people. How can the lessons learned in these movements be applied to social justice questions relating to the treatment of animals in our society?

The animal advocacy movement has moved forward by leaps and bounds in recent years. To learn more about the issues and about *The Ghosts In Our Machine* documentary, please visit the film’s website: [theghostsinourmachine.com](http://theghostsinourmachine.com). Please also be sure to visit Jo-Anne McArthur’s We Animals website: [weanimals.org](http://weanimals.org).



“Morality as it relates to the human animal relationship is a huge question. It’s the next big hurdle of social moral development that humans need to cross. I say next because it’s already underway.”

- Jonathan Balcombe, Ph.D, *The Ghosts In Our Machine*



**After 4 years in the dairy industry cows  
are considered “spent” and sent to slaughter.**




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**Fur accessories, fur clothing,  
and footwear with fur trim  
are steadily on the rise.**



**THEGHOSTSINOURMACHINE.COM**

# MEET THE FILM'S PROTAGONIST AND THE FILMMAKER



**Jo-Anne McArthur**

**Photographer and Founder of We Animals**  
**Protagonist, *The Ghosts In Our Machine***

“Humans are as much animal as the sentient beings we use for food, clothing, research, experimentation, work, entertainment, slavery and companionship. With this as its premise, We Animals aims to break down the barriers that humans have built which allow us to treat non-human animals as objects and not as beings with moral significance. The objective is to photograph our interactions with animals in such a way that the viewer finds new significance in these ordinary, often unnoticed situations of use, abuse and sharing of spaces. Since the conception of the project, stories and photographs for We Animals have been shot in over 40 countries and the photos have contributed to over 100 worldwide campaigns to end the suffering of animals.”





# MEET THE FILM'S PROTAGONIST AND THE FILMMAKER




**Liz Marshall**

**Director, Writer, Producer, *The Ghosts In Our Machine***

*"The Ghosts In Our Machine* is a journey of discovery into what is a complex social dilemma. In essence, humans have cleverly categorized non-human animals into three parts: domesticated pets, wildlife, and the ones we don't like to think about: the ghosts in our machine. Why do we value wildlife and our companion animals but not the billions of animals bred and used annually by global industries? It is this core question that prompted me to delve deeply to explore this subject matter. The film follows animal rights photojournalist Jo-Anne McArthur over the course of a year in parts of Europe, the USA, and in Canada. I chose to feature Jo-Anne as the film's protagonist because her mission is an inspiring and sympathetic entry-point into the animal issue, and her powerful photographs invite us to consider non-human animals as individuals.

As a filmmaker my heart is fully engaged, yet I am critically removed, looking through glass, examining the angles, the light, and the meaning of the greater story. My deepest motivation is to create an eye-opening experience for audiences, to remove people's blinders, and to celebrate underrepresented narratives. Through story, sound and picture I hope people will see animals differently – forever."





**In 2010, approximately 65,000 dogs  
were used in research, testing and  
teaching in the USA.**



**THEGHOSTSINOURMACHINE.COM**

# DISCUSSION POINTS

1. Which scene, image, or moment stands out the most for you, and why?
2. Is *The Ghosts In Our Machine* a persuasive documentary?  
If so, how? If not, why not?
3. Has *The Ghosts In Our Machine* inspired you to see animals differently?  
If so, how? If not, why not?
4. In the film, Jo-Anne McArthur states that she feels like a “war photographer” photographing an “invisible war.” What does “war” mean in the context of the film?
5. Think about the terms “farm sanctuary,” “wildlife refuge,” “animal shelter.” How do they describe the predicaments of animals in our modern industrialized world?
6. Do you see parallels between the animal advocacy movement and other social justice movements?  
If so, what? If not, why not?
7. As a consumer, has the film prompted you to examine your consumer choices and behavior? If so, how? If not, why not?
8. Is there a call to action in this film? If so, what is it?  
If not, why not?
9. Has the film influenced your attitude or actions towards animals?  
If so, please explain the details.
10. What is your pledge (promise) for the Ghosts?



## 06

# EXERCISES AND LESSON PLANS

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**Rationale for using the film:** *The Ghosts In Our Machine* is a multi-award winning documentary, celebrated globally for its effectiveness in attracting a wide audience to the subject of animal advocacy. Gently, yet with dramatic effect, the film invites people everywhere to morally consider the billions of nonhuman animals who have been reduced to mere production units for use within the food, entertainment, fashion, and research industries. *The Ghosts In Our Machine* illuminates the lives of these individual animals living within and rescued from our contemporary industrialized world. The film's human protagonist is Jo-Anne McArthur, an accessible, committed and celebrated activist photographer. The film is suited to students from high school grades 8 - 12, and for all college and university levels.



**Objectives:** The film, the film's educational guide, and the following exercises are designed to open people's eyes to realities of the industrialized use and abuse of nonhuman animals, and to inspire empathy, understanding, and critical thinking about who they are. From self-reflection to discussion, essay writing, debate, to creative audio-visual presentations, the aim of the following exercises and lessons plans is to offer diverse possibilities for students to engage with the subject matter after they have viewed *The Ghosts In Our Machine*.

**Recommended Areas of Study:** Activism, Agriculture, Animal Rights, Animal Welfare, Biography, Critical Animal Studies, Environment, Economics, Film Studies, Food Supply, Humane Education, Journalism, Law, Media Studies, Photography, Religion and Spirituality, Social Justice, Social Studies, Women and Gender Studies, World Religions, Philosophy.

## I. SELF REFLECTION: LOOKING INTO THE EYES OF ANIMALS

*Note for teacher: There is no prescribed length for each written response. The purpose of this self-reflection exercise, is to evoke an affective response.*

Spend some time on your own looking into the eyes of the animals from the film on the following pages.

After reflection, explore these questions:

1. Which animal are you most drawn to, and why?
2. What are the similarities between your eyes, and the eyes of that animal?
3. "Eyes are the window to the soul". How would you relate this phrase to the animal image you are most drawn to?













## 2A. CREATIVE NARRATIVE WRITING: LOOKING INTO THE EYES OF THE “GHOSTS”

PHOTOGRAPHS BY JO-ANNE MCARTHUR

*Note for teacher: Exercises 2a and 2b are complimentary. They can also be stand-alone assignments.*

Write a one to two page short story told from the point-of-view of one of the animals, or the animal's mother. Describe the animal's past, rescue, or present predicament.







## 2B. LITERARY ANALYSIS: MARK TWAIN'S SHORT STORY "A DOG'S TAIL"

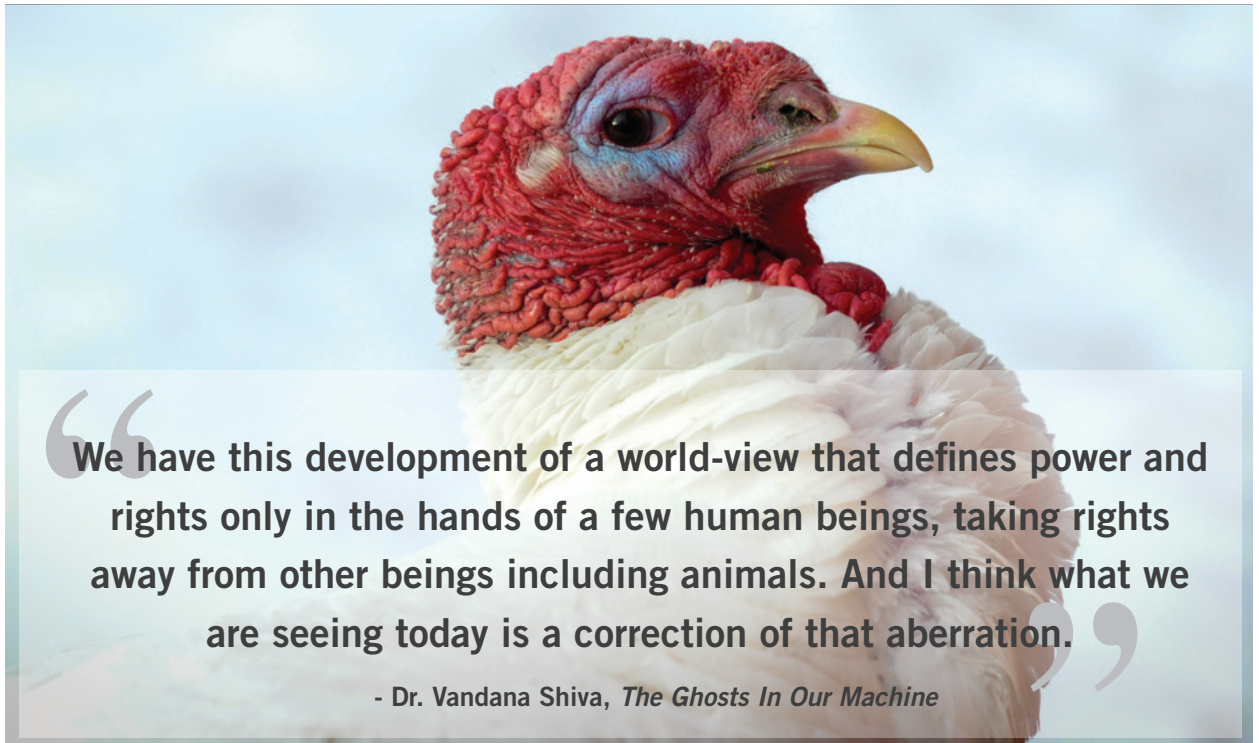
After reading the story, in a short essay identify at least four of Twain's beliefs regarding dogs, men, women, and children, as voiced by the dog. Cite dialog and the dog's internal monologue (narration) to support your claims.

## 3. ESSAY: ANIMALS AS "PROPERTY", OR ANIMALS AS "SENTIENT BEINGS"?

*Note for teacher: Reference the film's educational guide Introduction to Animal Advocacy.*

Write a short essay answer, or with others as a Think/Pair/Share, based on the following speculative question:

1. What would society would be like if all nonhuman animals were granted rights? What would that look like? What would have to change? What would change in your life?





## 4. GROUP PROJECT: MAKE THE CASE FOR OR AGAINST A UN DECLARATION ON THE RIGHTS OF ANIMALS

To be answered as part of a group discussion, a structured debate, or a creative audio-visual presentation, such as a video or video blog or short film.

*Note to teacher: Reference the UN Declaration on the Rights of the Child:  
<http://www.un.org/cyberschoolbus/humanrights/resources/child.asp>*

1. List the rights that you think are most important for children to thrive.
2. What conditions are the most important for companion animals to thrive, like the dogs Maggie and Abbey featured in *The Ghosts In Our Machine*?
3. Describe the areas of overlap between children's rights and the rights of companion animals. What needs do they have in common?
4. Should companion animals be granted rights? If so, what rights, and why? If not, why not?
5. Should nonhuman animal species used within animal industries, like Sonny, Fanny, Julia, and all of the other "Ghosts" featured in the film, be granted rights? If so, what rights, and why? If not, why not?

## 5. REVIEW OR CRITIQUE A REVIEW OF THE GHOSTS IN OUR MACHINE

Read four film reviews from the long list of reviews compiled on the film's website: <http://www.theghostsinourmachine.com/press/>.

In a 4-5 paragraph essay, compare and contrast the reviews. Or, write your own review of *The Ghosts In Our Machine*.

Questions to consider:

1. Is *The Ghosts In Our Machine* a persuasive documentary? If so, how? If not, why not?
2. Is there a call to action? If so, what is it? If not, why not?
3. Does *The Ghosts In Our Machine* inspire you to see animals differently? If so, how? If not, why not?
4. As a consumer, has the film prompted you to examine your consumer choices and behavior? If so, how? If not, why not?



LA Weekly

## 6A. DECONSTRUCTING THE GHOSTS IN OUR MACHINE

Farm Sanctuary Chapters from 92:00 minute version of the film:

- Farm Sanctuary: Heaven Part I
- Julia's Rescue
- Farm Sanctuary: Heaven Part II

*Note for teacher: Explain to students that each image, transition, sound, and word is carefully considered and deliberate. Filmmaking is a language. Nothing is random.*

Re-watch and discuss, or assign a writing assignment focussed on all three of the Farm Sanctuary scenes. Specifically, be aware of the transitions to and from the Farm Sanctuary scenes. What comes before and after, and why? Pay attention to the sound design, dialogue, use of music, the cinematographic choices and photographs, and the use of colour.

### Questions to consider:

1. What do these scenes conjure up for you?
2. What do Jo-Anne's photographs combined with the cinematography communicate?
3. Why do you think the filmmakers made these very specific decisions?



## 6B. DECONSTRUCTING THE GHOSTS IN OUR MACHINE

Fur Investigation Chapter from 60:00 and/or 92:00 minute versions of the film:  
Chapter: Fur Investigation

*Note for teacher: Explain to students that each image, transition, sound, and word is carefully considered and deliberate. Filmmaking is a language. Nothing is random.*

Re-watch and discuss, or assign a writing assignment focussed on the fur investigation scene. Specifically, be aware of the transitions to and from the scene. What comes before and after, and why? Pay attention to the sound design, absence of dialogue, absence of music, the cinematographic choices and photographs, and the use of colour.

### Questions to consider:

1. Explain the effectiveness, or lack of effectiveness of this scene.
2. What do Jo-Anne's photographs combined with the cinematography communicate?
3. Why do you think the filmmakers made these very specific decisions? Explain.

“Someone once said that animals are another nation. They're not aliens, they're not property, they're not dangers, but rather they're other beings with whom we share life, who have as vested an interest in their own lives as we do. All we need to do is make certain that we don't become the plague, the vermin that takes it all over, but rather make sure that there's always room for them.”

- Dr. Theodora Capaldo, *The Ghosts In Our Machine*



## 7. VISUAL ASSIGNMENT: WHAT IS WAR PHOTOGRAPHY?

Jo-Anne describes herself as a “war photographer”, in the film she describes her work within the context of there being an “invisible war on animals”.

Gather a collage of images from various sources, such as magazines and the internet, which conjure up “war”. Compare and contrast the found images with your own selection of Jo-Anne McArthur’s photographs from her We Animals website: ([weanimals.org](http://weanimals.org)).

Questions to consider:

1. What does “war” mean in relation to nonhuman animals?
2. Think about the terms “farm sanctuary”; “wildlife refuge”; “animal shelter”. How do they describe the condition of animals within the context of our modern industrialized world?



“I’ve been photographing the war on animals for over a decade; in a sense I am a war photographer. I say this, not to bring attention to me, the photographer, but to the war. I want people to start acknowledging our treatment of animals as such.”

- Jo-Anne McArthur, *We Animals*

## 8. ESSAY OR AUDIO-VISUAL EXERCISE: TRACK YOUR LUNCH

*Note to teacher: This will require interviews with school and district food service personnel or vendors, and/or with family members.*

Document what you ate for lunch today or yesterday.

Deconstruct each food item focusing on these questions:

1. Was the item plant-based or animal based?
2. If plant based, where was the food grown? Reflect on the process that product went through to become your lunch, e.g., the farmer, the growing conditions, how was it harvested, how far was it transported, and who prepared it so that you could eat it?
3. If animal based, were the animals raised? How were they raised? What process did the animals go through to become your lunch, e.g., who raised them, what did they require to grow, how were the animals transformed into a food product, how were they transported from farm to slaughterhouse, how were they slaughtered, who prepared your food for you to eat?
4. How was each food item marketed to you?
5. What did you learn about your choices from this exercise? Is there anything you would like to change about your choices? If so, what? If not, why not?
6. If you would like to change something about what you ate for lunch today, what would it be? How might you change it for next time?

“Inherently, any living organism has basic rights to bodily integrity and liberty. And to not be owned or controlled by another being. And by that I mean, not that they’re deserving of rights that we might give them, but that they have them already. By virtue of who they are.”

- Dr. Lori Marino, *The Ghosts In Our Machine*

## 9. RESEARCH OR ESSAY ASSIGNMENT: VIVISECTION

Define what vivisection is.

Define the position(s) of the anti-vivisection movement.

Research your state or province's laws to see if it is legally permissible for high school students to decline to participate in vivisection activities, and to substitute other work without negative impact on grades or class standing.

## 10. HIGH SCHOOL I- 2 CLASS PERIODS

*Note for teacher: The following short assignments are designed for classes 120 minutes or less. This is either a Think/Pair/Share exercise, or a writing exercise.*

1. In either a 4-5 paragraph essay or a blog, describe the scene in the film that affected you most deeply. Explain why in as much detail as possible.
2. What have you learned from *The Ghosts In Our Machine* documentary? What would you now like to learn more about, as a result of seeing the film?
3. If you could speak to Jo-Anne McArthur, what 3-questions would you like to ask her?
4. Do you see parallels between the animal protection movement and the civil rights or women's rights movements? If so, what? If not, why not?

# HOW TO HELP ANIMALS\*

- Lead by example, live compassionately.
- Reduce and eliminate your consumption of animals. There are many delicious and healthy alternatives to meat and dairy.
- Volunteer at your local animal shelter or sanctuary.
- Organize a fundraiser for your favorite animal charity. If you don't have a favorite, pick one from the list of organizations on the *The Ghosts In Our Machine* website:

[theghostsinourmachine.com/get-involved-non-human-animals-used-for-food](http://theghostsinourmachine.com/get-involved-non-human-animals-used-for-food)

[theghostsinourmachine.com/get-involved-non-human-animals-used-for-fashion/](http://theghostsinourmachine.com/get-involved-non-human-animals-used-for-fashion/)

[theghostsinourmachine.com/get-involved-non-human-animals-used-for-biomedical-research/](http://theghostsinourmachine.com/get-involved-non-human-animals-used-for-biomedical-research/)

[theghostsinourmachine.com/get-involved-non-human-animals-used-for-entertainment/](http://theghostsinourmachine.com/get-involved-non-human-animals-used-for-entertainment/)

There are also a number of organizations listed on the We Animals website:

[weanimals.org/links.php](http://weanimals.org/links.php)

- Help legislate change. Write to and speak with your local political representatives about animal issues.
- Visit your neighbors and collect needed supplies for your local shelter or sanctuary. People can donate animal food, old towels and blankets, toys, and more.
- Foster a homeless animal.
- Spay and neuter your companion animals. This will help reduce the number of unwanted and homeless animals around the globe.
- Don't attend circuses, rodeos, and fairs that use animals for entertainment. Speak up against such blatant and unnecessary forms of cruelty. Animals do not exist for our entertainment. Support and learn about sanctuaries, watch wildlife films and television programs such as National Geographic.
- Shop "cruelty free" by buying products that are not tested on animals.

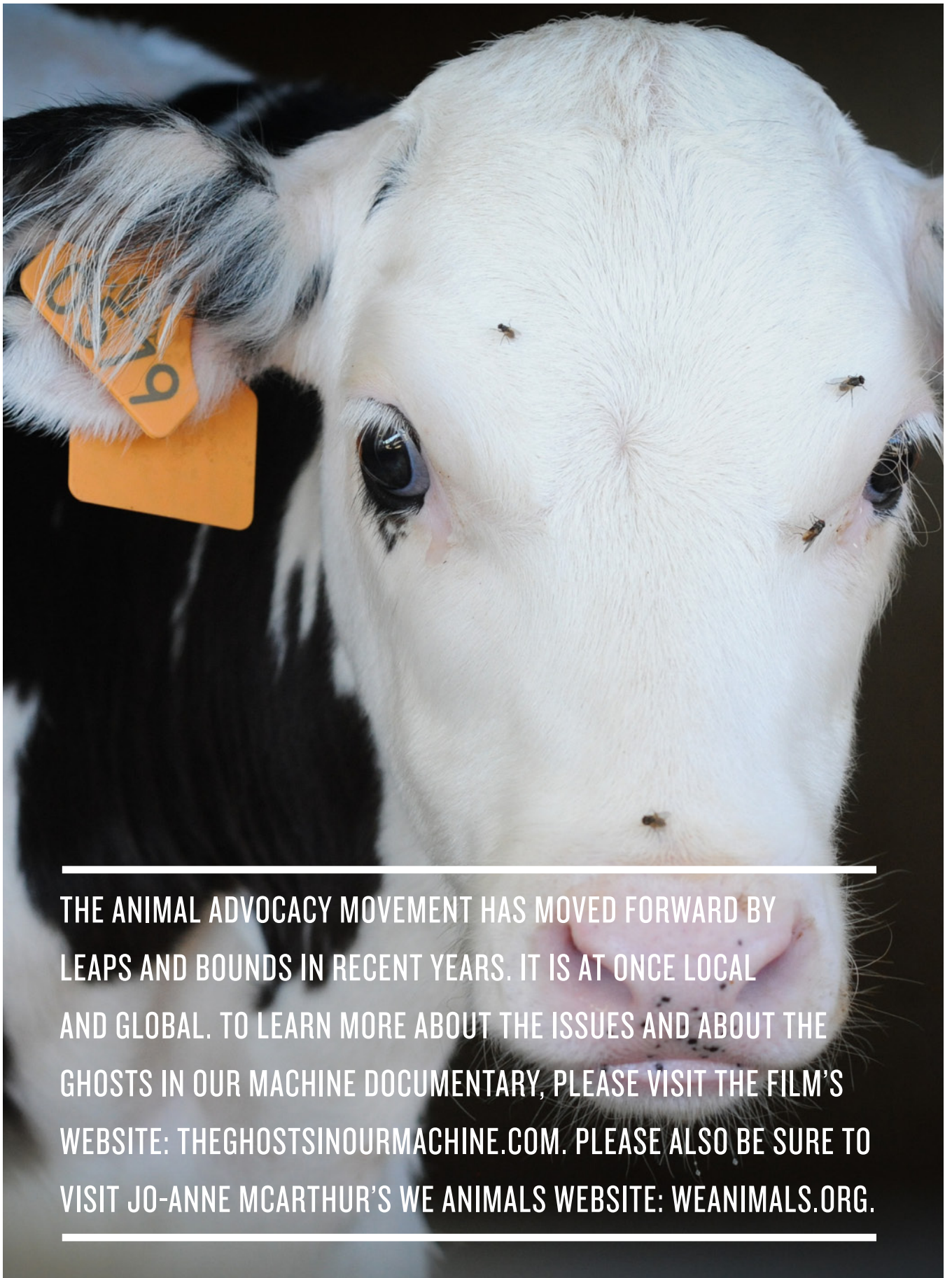


- Speak up if you see a situation of cruelty or abuse. Call the authorities, and inform the community. We so often assume someone else will deal with the problem, or that it will go away.
- We are responsible for the animals we bring into our lives. Don't buy or adopt animals on a whim, or as gifts. These are the animals who so often get returned, sent to a shelter, or euthanized.
- Don't wear animal products such as fur. And, most often, leather and suede clothing items have been made from the skins of animals used for industrialized agriculture.
- Sport clothes with an animal-friendly message, stick an evocative bumper sticker on your car, carry literature that promotes compassion towards animals.
- Object to animal dissection in your science classes. There are alternatives which you can bring to your class room and promote: [interniche.org](http://interniche.org) and [neavs.org/education/overview](http://neavs.org/education/overview)
- Leave literature and leaflets about compassion towards animals at your school, community centre, dentist office, etc.
- Host a vegan party or potluck. Let people know how delicious vegan food is!
- Support your local vegetarian/vegan restaurants. Bring your family!
- Report animal cruelty to your local SPCA or Animal Services.
- Community and school outreach. Give a talk or sponsor a speaker to come and talk about animal cruelty and compassion towards animals at your university, college, high school, library, or community center.
- Bring Humane Educators to your school. To learn about the We Animals Humane Education program visit: [humaneeducation.ca/](http://humaneeducation.ca/)
- Vote with your dollar. When you spend money that supports cruelty to animals, you perpetuate animal cruelty.
- Host animal documentary movie night, either at your home or at a local school, library, or cinema. Screen The Ghosts In Our Machine for your family, friends, and community.
- Organize or attend a public protest against animal cruelty.

- Sign a petition, share it through social media.
- Keep the phone number of local animal rescue organizations on hand in case you see a case of neglect, cruelty, or come across an injured animal.
- Ask your school cafeteria to offer more veggie options.
- Lights off! Ask office buildings to turn their lights off at night, a simple act which helps to reduce the high number of birds who are killed each year when they fly into windows.
- While travelling don't buy endangered animal products such as ivory or other body parts. Don't eat the meat of endangered animals, such as gorillas and chimpanzees in Africa. Further to that, let the vendors know that you don't approve!

*\* With thanks to Jo-Anne McArthur and We Animals for permission to share this list in this educational guide.*





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THE ANIMAL ADVOCACY MOVEMENT HAS MOVED FORWARD BY  
LEAPS AND BOUNDS IN RECENT YEARS. IT IS AT ONCE LOCAL  
AND GLOBAL. TO LEARN MORE ABOUT THE ISSUES AND ABOUT THE  
GHOSTS IN OUR MACHINE DOCUMENTARY, PLEASE VISIT THE FILM'S  
WEBSITE: [THEGHOSTSINOURMACHINE.COM](http://THEGHOSTSINOURMACHINE.COM). PLEASE ALSO BE SURE TO  
VISIT JO-ANNE MCARTHUR'S WE ANIMALS WEBSITE: [WEANIMALS.ORG](http://WEANIMALS.ORG).

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