# JF21 – PIC – Cats (1:30)

#### Counterplan text: States ought to ban lethal autonomous weapons except the “grooming trap”, which they should deploy for use in killing cats. Slezak 16.

[Slezak, Michael. “Robots, lasers, poison: the high-tech bid to cull wild cats in the outback.” The Guardian. <https://www.theguardian.com/environment/2016/apr/17/robots-lasers-poison-the-high-tech-bid-to-cull-wild-cats-in-the-outback>. Published 16 April 2016] SHS ZS

**Robotic killers that detect** feral **cats**, **spray their fur with poison and rely on them to** essentially **lick themselves to death have been deployed in the Australian desert** for the first time. Feral **cats are one of the biggest threats to many of Australia’s** endangered species, killing millions of animals every day throughout the country – and **controlling them has proved difficult**. **It took** John **Read**, an ecologist **seven years to invent** and produce four of the “**grooming traps**”. After extensive testing, he has switched on the first one in a nature reserve in south-west [Queensland](https://www.theguardian.com/australia-news/queensland). “Cats are hard-wired to hunt,” Read said. That means they can kill dozens of animals a night but it also means they are often reluctant to eat baits since they prefer to kill an animal themselves. “**This trap targets the cats’ achilles heel**,” Read said. Being fastidious groomers, cats will lick off almost anything that gets on their fur. So Read has developed a trap that exploits their tendency to try to get their numbers under control. **With four laser rangefinders, the trap detects when something moves** in front of it. If it’s taller than a cat – perhaps a dingo or a koala – the top rangefinder will be triggered and it shuts down. Similarly, a rangefinder at the bottom needs to be able to see between the cat’s legs, meaning a low-slung animal like a wombat or a quoll won’t trigger it. Finally, **two rangefinders at the front and back of the trap need to be triggered simultaneously**, indicating something the length of a cat has moved in front of it. Read said there were two other ways the trap would avoid hurting native animals. Firstly, the poison being used was 1080, which occurred naturally in some Australian plants, and, as a result, native animals were less susceptible to it. The dose used was, therefore, able to kill three cats but unlikely to kill a native animal, he said. The trap also relied on the animal licking the poison off its fur, which cats would reliably do, but most other animals were less likely to. The traps were also equipped with speakers and recordings of animals that cats might prey on, including the sound of rats and cats in distress, which could attract cats to the area. After conducting trials in enclosed spaces and a small field trial of an earlier model, Read installed the the new optimised grooming trap in “camera-only” mode earlier in the year. That allowed him to test what animals would activate the trap without actually firing any poison. Last week the first live grooming trap was switched on in Pullen Pullen reserve, a 56,000ha property in a secret location. It was bought by Bush Heritage Australia to protect the enigmatic [night parrot](https://www.theguardian.com/environment/2015/aug/10/night-parrot-capture-and-tagging-hailed-as-holy-grail-moment-for-bird-lovers), a nocturnal parrot from central Australia that many thought was extinct until the 1990s. Read was also beginning to switch on live grooming traps in Venus Bay and Wilpena in South Australia. “The three trial locations are all part of the same trial to test and optimise the traps before we will hopefully redesign and manufacture 50 or more traps for a bigger trial at a wider range of sites,” he said. Read said **more than $450,000 had been spent developing the traps**, with funding from several sources, including Bush Heritage Australia and the South Australian government. Rob Murphy, north Australia manager from Bush Heritage Australia, said the traps were a key component of the new Pullen Pullen night parrot reserve. “Sanctuary at Pullen Pullen reserve is critical for this special bird that still could be lost forever if we don’t work together for the long term to protect it,” he said.

#### It competes – lethal weapons apply physical force to cause harm – it’s NOT specific to humans and o/w since it has intent to define and reflects scope of real ban.

Gubrud 18, Mark A. Gubrud [Physicist and adjunct professor in the Peace, War and Defense curriculum at the University of North Carolina.] "The Ottawa Definition of Landmines as a Start to **Defining LAWS**," Convention on Conventional Weapons Group of Governmental Experts Meeting on lethal autonomous weapons systems, United Nations Geneva, <https://reachingcriticalwill.org/images/documents/Disarmament-fora/ccw/2018/gge/documents/Landmines-and-LAWS.pdf> April 9-13 2018 //Adam

Finally, it may be necessary to define the terms “lethal” and “lethality” for this context, since it is not acceptable to allow autonomous weapons to attack materiel targets, at least with destructive or damaging, kinetic force, which will inevitably also endanger humans. The CCW may still want to avoid stirring “cyber” warfare into this pot. But it cannot free robots to fight other robots with live weapons, as if robotic warfare would not become general conflict. Therefore the definition of “lethal” must here be something like: Lethal weapons systems apply physical force against objects or persons, with effects which may include impediment, harm, damage, destruction or death. It is most important to remember that this is only an attempt at a working definition of LAWS which can be the basis for an agreement to ban or regulate some or all of them. The approach does not seek to ban everything that falls under the definition of LAWS. But to avoid a narrow ban that could be circumvented just by changing one detail of a future weapon system so that it fell outside the definition, it bans all LAWS by presumption and enumerates exceptions for weapons systems, such as close-in defenses against uninhabited munitions, that may be considered desirable, or for existing systems that we agree, by negotiation, to grandfather in.

#### Cats gut biodiversity and contribute to the global extinction of multiple species and kill billions of animals annually. Morelle 13.

[Morelle, Rebecca. “Cats killing billions of animals in the US.” BBC. <https://www.bbc.com/news/science-environment-21236690>. Published 29 January 2013] SHS ZS

**Cats are one of the top threats to US wildlife, killing billions of animals each year**, a study suggests. The authors estimate **they are responsible for the deaths of** between 1.4 and 3.7 billion birds and 6.9-20.7 **billion mammals annually**. [Writing in Nature Communications](http://www.nature.com/ncomms/journal/v4/n1/full/ncomms2380.html), the scientists said stray and feral cats were the worst offenders. However, they added that pet cats also played a role and that owners should do more to reduce their impact. The authors concluded that **more animals are dying at the claws of cats in the United States than in road accidents**, **collisions with buildings or poisonings**. The domestic cat's killer instinct has been well documented on many islands around the world. **Felines** accompanying their human companions have gone on to prey on the local wildlife, and they **have been blamed for the global extinction of 33 species**. But their impact on mainland areas has been harder to chart. To find out more, researchers from the Smithsonian Conservation Biology Institute (SCBI) and the US Fish and Wildlife Service carried out a review of studies that had previously looked at the predatory prowess of cats. Their analysis revealed that the **cat killings were much higher than previous studies had suggested**: they found that they had killed more than four times as many birds as has been previously estimated. **Birds native to the US**, such as the American Robin, **were most at risk**, and mice, shrews, voles, squirrels and rabbits were the mammals most likely to be killed. Dr Pete Marra from the SCBI said: "Our study suggests that **they are the top threat to US wildlife**." The team said that "un-owned" cats, which they classified as strays, feral cats and farm cats, were killing about three times as many animals as pet cats. However, they said pet cats were still killing significant numbers of animals, and that their owners should do more to limit the impact. Dr Marra said: "We hope that the large amount of wildlife mortality indicated by our research convinces some cat owners to keep their cats indoors and that it alerts policymakers, wildlife managers and scientists to the large magnitude of wildlife mortality caused by cat predation." A spokeswoman for the animal welfare charity the RSPCA said that a properly fitted collar and bell could reduce a cat's success when hunting by at least a third.

**Extinction. Jordan 15.**

[Jordan 15 – Rob Jordan develops content for the Stanford Woods Institute and writes research briefs, press releases and program overviews. He is citing Paul Ehrlich of the Stanford Woods Institute, Anthony D. Barnosky of the University of California at Berkeley, Andrés García of Universidad Autónoma de México, Robert M. Pringle of Princeton University, and Todd M. Palmer of the University of Florida. (“Stanford researcher declares that the sixth mass extinction is here,” <https://news.stanford.edu/2015/06/19/mass-extinction-ehrlich-061915/>, June 19, 2015)] SHS ZS

Stanford biologist Paul **Ehrlich calls for fast action to conserve threatened species**, populations and habitat **before the window of opportunity closes**. There is no longer any doubt: **We are entering a mass extinction that threatens humanity’s existence**. That is the bad news at the center of a new study by a group of scientists including Paul Ehrlich, the Bing Professor of Population Studies in biology and a senior fellow at the Stanford Woods Institute for the Environment. Ehrlich and his co-authors call for fast action to conserve threatened species, populations and habitat, but warn that the window of opportunity is rapidly closing. “[The study] shows **without any significant doubt that we are now entering the sixth great** **mass extinction event**,” Ehrlich said. Although most well known for his positions on human population, Ehrlich has done extensive work on extinctions going back to his 1981 book, Extinction: The Causes and Consequences of the Disappearance of Species. He has long tied his work on coevolution, on racial, gender and economic justice, and on nuclear winter with the issue of wildlife populations and species loss. There is general agreement among scientists that **extinction rates have reached levels unparalleled since the dinosaurs died** **out 66 million years ago**. However, some have challenged the theory, believing earlier estimates rested on assumptions that overestimated the crisis. The new study, published in the journal Science Advances, shows that even with extremely conservative estimates, **species are disappearing up to about 100 times faster than the normal rate between mass extinctions, known as the background rate**. “**If it is allowed to continue, life would take many millions of years to recover, and our species itself would likely disappear early on**,” said lead author Gerardo Ceballos of the Universidad Autónoma de México. Using fossil records and extinction counts from a range of records, the researchers compared a highly conservative estimate of current extinctions with a background rate estimate twice as high as those widely used in previous analyses. This way, they brought the two estimates – current extinction rate and average background or going-on-all-the-time extinction rate – as close to each other as possible. Focusing on vertebrates, the group for which the most reliable modern and fossil data exist, the researchers asked whether **even the lowest estimates of the difference between background and contemporary extinction rates** **still justify the conclusion that people are precipitating “a global spasm of biodiversity loss**.” The answer: a definitive yes. “We emphasize that our **calculations very likely underestimate the severity of the extinction crisis**, because our aim was to place a realistic lower bound on humanity’s impact on biodiversity,” the researchers write. To history’s steady drumbeat, a **human population growing in numbers**, per capita consumption and economic inequity **has altered or destroyed natural habitats**. The long list of impacts includes: Land clearing for farming, logging and settlement; Introduction of invasive species; **Carbon emissions** that **drive climate change and ocean acidification**; Toxins that alter and poison ecosystems; Now, the specter of extinction hangs over about 41 percent of all amphibian species and 26 percent of all mammals, according to the International Union for Conservation of Nature, which maintains an authoritative list of threatened and extinct species. “**There are examples of species all over the world that are essentially the walking dead**,” Ehrlich said. As species disappear, so do crucial ecosystem services such as honeybees’ crop pollination and wetlands’ water purification. At the current rate of species loss, people will lose many biodiversity benefits within three generations, the study’s authors write. “We are sawing off the limb that we are sitting on,” Ehrlich said. Despite the gloomy outlook, there is a meaningful way forward, according to Ehrlich and his colleagues. “**Avoiding a true sixth mass extinction will require rapid, greatly intensified efforts to conserve already threatened species, and to alleviate pressures on their populations – notably habitat loss, over-exploitation for economic gain and climate change**,” the study’s authors write. In the meantime, the researchers hope their work will inform conservation efforts, the maintenance of ecosystem services and public policy.

#### Cats contribute to fatal emissions on climate change and threaten biodiversity – extinction. Potenza 17.

[Potenza, Alessandra. “The environmental footprint of your pet is bigger than you think” The Verge. https://www.theverge.com/2017/8/4/16094674/cats-dogs-meat-diet-greenhouse-gases-climate-change . Published 4 August 2017.] SHS ZS

**Bad news for environmentally conscious pet owners**: **cats’ and dogs’ eating habits are** **responsible for** dumping as many as **64 million tons of greenhouse gases into the atmosphere** every year — [**roughly the equivalent**](https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator) **of driving over 13 million cars**. That’s due to all the meat our furry friends gobble down, according to new research. There are [more than 163 million dogs and cats](http://www.americanpetproducts.org/press_industrytrends.asp) in the US, and they just love to eat. In fact, cats and dogs in the US consume about 19 percent as many calories as people do in the US, or about as much as 62 million Americans, according to [a new study published in Plos One](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0181301). Because much of that food is meat, and **meat production is known to** [**heavily contribute to climate change**](http://www.climatecentral.org/news/studies-link-red-meat-and-climate-change-20264), **our pets leave a pretty stark carbon footprint on our environment**. THEY JUST LOVE TO EAT Raising livestock for meat takes up land, water, and energy, which pumps lots of heat-trapping greenhouse gases into the environment. It takes 24 kilograms of carbon dioxide to make one kilo of pork, and 1,000 kilos of CO2 to make just one kilo of beef, [according to a study by the Proceedings of the National Academy of Sciences](https://www.economist.com/blogs/feastandfamine/2013/12/livestock). When we talk about climate change, we often think about how much meat people eat. But Gregory Okin, a geographer at UCLA, wanted to focus on pets. By calculating the number of dogs and cats in the US, their average weights, and ingredients in pet foods, Okin tallied the carbon footprint of our animal friends. His findings: **American cats and dogs consume about 19 percent as many calories as people do in the US; and because they’re mainly meat-eaters, they consume about 30 percent of the animal-derived calories that people consume**. They also produce 30 percent as much poop as Americans do. (If all those feces were disposed as garbage, it’d be equivalent to the total trash produced by over 6 million Americans, or approximately the population of Massachusetts, the study says.) All in all, **American cats and dogs are responsible for producing about 64 million tons of methane and nitrous oxide, two powerful greenhouse gases that contribute to climate change**, according to Okin’s calculations. **MAYBE YOU CAN JUST OPT FOR A HAMSTER, INSTEAD** The findings are meaningful because [pet ownership is skyrocketing in Asia](https://www.forbes.com/sites/simonmontlake/2011/10/21/animal-spirits-drive-asias-booming-pet-industry/#7c1a7fa31b1c), and that means dogs’ and cats’ environmental footprint is just going to increase. You could make the argument that only leftover meat goes into pet food, so if animals didn't eat it, it would be wasted. But in the US, pet owners are also increasingly feeding their animal friends gourmet food that has higher-quality meat (what’s referred to as “human-grade” on pet food packaging). That means that pets aren’t just eating leftover meat, like animal organs, that people find too revolting to swallow. So their meat consumption should be considered an add-on to our own. The study doesn’t go too deeply into what pet owners can do about this: after all, cats — even more than dogs — [need their protein](https://www.scientificamerican.com/article/veggie-cat-food/). But pet owners could be more careful about pet food ingredients, like choosing plant-based proteins when they can, or just reducing the amount of treats pets get. (Obesity is a [major](http://www.jarvm.com/articles/Vol4Iss2/Lund.pdf) problem among domestic animals, the study points out.) Or maybe you can just opt for a hamster, instead. “This analysis does not mean to imply that dog and cat ownership should be curtailed for environmental reasons,” Okin writes in his study, “but neither should we view it as an unalloyed good.”

#### Extinction. Schultz 16.

Robert A. Schultz 16, retired Professor and Chair of Computer Information Systems at Woodbury University, 2016, “Modern Technology and Human Extinction,” http://proceedings.informingscience.org/InSITE2016/InSITE16p131-145Schultz2307.pdf

There is consensus that **there is a** relatively **short window to reduce carbon emissions before drastic effects** occur. Recent credible **projections** of the result of lack of rapid drastic action **is an average temperature increase of about 10o F by 2050**. **This change** alone **will be** incredibly **disruptive to all life, but will also cause great weather and climate change**. For comparison purposes, a 10 degree (Fahrenheit) decrease was enough to cause an ice layer 4000 feet thick over Wisconsin (Co2gether, 2012). **Recently relevant information has surfaced about a massive previous extinction**. This is the Permian extinction, which happened 252 million years ago, during which 95% of all species on earth, both terrestrial and aquatic, vanished. **The ocean temperature after almost all life had disappeared was 15 degrees** (Fahrenheit) **above current ocean temperatures**. Recent information about **the Permian extinction** indicates it **was caused by a rapid increase in land and ocean temperatures**, caused by the sudden appearance of stupendous amounts of carbon in the form of greenhouse gases (Kolbert, 2014, pp. 102-144). The origin of the carbon in these enormous quantities is not yet known, but one possibility is **the sudden release of methane gases stored in permafrost.** This is also a possibility in our current situation. If so, **extinction would be a natural side effect of human processes**. **There is** also **a real** but smaller **possibility of what is called “runaway greenhouse**,” **in which the earth’s temperature becomes like Venus’ surface temperature of 800o** **The threat of extinction here is** not entirely sudden. The threat is, if anything, **worse**. **Changes in the atmosphere**--mainly increases in the concentration of greenhouse gases in the atmosphere-- **can start processes that can’t be reversed but which take long periods of time to manifest.** “Runaway greenhouse” may be the worst. Once again, suggestions of technological solutions to this situation should be treated with some skepticism. These **proposals are often made by technophiles ignoring all the evidence that technology is very much subject to unanticipated side effects and unanticipated failures.** What has happened concerning the depletion of the ozone layer should be a clear warning against the facile uses of technology through geoengineering to alter the makeup of the entire planet and its atmosphere. The complicating factor in **assessing extinction likelihood from climate change is corporations**, especially **American fossil fuel corporations** such as Exxon-Mobil and Shell. Through their contributions, **they have been able to delay legislation ameliorating global warming and climate change.** As mentioned before, recently released papers from Exxon-Mobil show that the corporation did accept the scientific findings about global warming and climate change. But they concluded that maintaining their profits was more important than acting to ameliorate climate change. Since it is not a matter of getting corporations to appreciate scientific facts, **the chances of extinction from climate change are good.** To ameliorate climate change, it is important to leave a high percentage of fossil fuel reserves in the ground. But this is exactly what a profit-seeking fossil fuel corporation cannot do. One can still hope that because fossil fuel corporations are made up of individuals, increasingly bad consequences of global warming and climate change will change their minds about profits. But because of the lag in effects, this mind change will probably be too late. **So I conclude we will probably see something like the effects of the Permian extinction perhaps some time around 2050. (The Permian extinction was 95% extinction of all species.)** This assumes the release of methane from the arctic will take place around then