

Dr. Philipp C. Bleek Associate Professor in the Nonproliferation and Terrorism Studies Program at the Middlebury Institute of International Studies at Monterey and Zachary Kallenborn, Research Affiliate with the Unconventional Weapons and Technology Division of the National Consortium for the Study of Terrorism and Responses to Terrorism, talk to Gwyn Winfield about eco-radicals

# Into the green

***“They send us a message that they can take whatever they want. But we will send them a message. That this... this is our land!”***

**Jake Sully, Avatar**

**L**ike a giant game of Cluedo, we think we know who the perpetrators of a CBRN attack will be. It could be Mrs White Supremacist, Professor Plum Crazy, Colonel Mustard Gas with his black flags of Khorasan or Miss Red Force of Russia, all the established tropes of right-wing supremacists, lunatics, Muslim fundamentalists, or well-established state actors. We at *CBRN World* are equally guilty of this, focusing on issues that touch on one or more of these guiding lights. Yet there is one other character often forgotten in the hunt for ‘whodunnit’ and that is Reverend

Green Activism [Apologies to all those who didn’t grow up with the traditional version of Cluedo/Clue and instead had Dr Orchid etc. Ed.].

In the process of looking for new things to write about, we found this paper by Zak Kallenborn and Philipp Bleek - *Avatars of the Earth: Radical Environmentalism and Chemical, Biological, Radiological, and Nuclear (CBRN) Weapons*<sup>1</sup> [Those of you without a Taylor and Francis subscription can enjoy a podcast on the same.<sup>2</sup> Ed.]. Essentially the paper examines the motivations and capabilities of environmental terrorists to pursue

CBRN weapons. While elements of these, especially nuclear, are beyond both their capabilities and ethos, others may well be extremely attractive to them.

For example, in World War Two, the Germans flooded the Pontine Marshes<sup>3</sup> to slow the Allied advance. A side effect that may well have been intended, was a sharp rise in malaria among the inhabitants and Allied soldiers. This would appeal to an environmentalist keen for Mother Earth to have a push in the right direction. Draining and damming marshes is often perceived as an environmental crime, and if mosquito vectors are going to infect, and

*America recently saw an upsurge in right wing extremism, but this is not the only group out there wanting to cause trouble*  
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possibly kill people, well, isn't that just what we have been doing to the animals?

The potential for radical environmentalists to utilise chemical, biological and radiological weapons might not be national planning scenario #1, but so many profitable crops underpin the US economy, that introducing species to attack these over modified plants would have a crippling effect on elements of the US (and elsewhere) economy<sup>4</sup>. These might not be the showy attacks of the Manchester Arena bombing, or the Westgate mall siege, but such assaults would be profound, misery-inducing and prolonged.

So has the focus on religious and right-wing terrorists obscured a worrying, if less violent, threat from groups like Deep Green Resistance<sup>5</sup> or Individualists Tending towards the Wild<sup>6</sup>? Both Dr Bleek and Zak Kallenborn felt that these groups weren't about to end the world as we know it, but that they deserve the same kind of scrutiny as other terrorist groups.

"They belong on the list," said Philipp Bleek. "Even though we're talking about something that either hasn't happened or mostly hasn't happened, there's always the question: 'Who might do it in the future?' Eco-radicals belong on the list together with jihadists and various other religiously motivated extremists."

"That's right," agreed Zak Kallenborn. "The central argument of our paper was that we need to worry about outliers, the folks with extreme, globe-changing motivations that also tend to be rare. Those outliers already exist. We have seen them in the rise of eco-radicalism, such as RISE's 1979 attempted attack on the Chicago water system. That was when a couple of high school students decided they wanted to poison it, cause mass destruction to a bunch of people and repopulate the earth with enlightened revolutionaries<sup>7</sup>. There shouldn't be a league table of outliers, because what we're talking about is rare cases, and it doesn't really matter which group's under discussion. There are marginal differences, but to an extent it's not important when you look at a broader scale of terrorist attacks."

One of the most 'successful' CBRN attacks was the Rajneeshee adulteration of salad bars with salmonella in the hope of influencing an election<sup>8</sup>, a fact that was not discovered for over a year. The aim was not solely to kill people and cause terror - and the same might apply for radical environmentalists. For many radical environmentalists, all life is sacrosanct, and damage to the environment, but making people sick enough to stop them working at a lab science company... maybe that's ok?

Zak Kallenborn agreed: "I think that's right and it's what we've seen. Eco-radicals have tended to be more targeted than other terrorists, emphasizing specific perceived violators of environmental integrity and animal rights. A recent case was when the Stop Huntingdon Animal Cruelty<sup>9</sup> group sprayed a marketer in the face with acid, blinding them for a while. It was very clearly targeted towards this particular organisation because they wanted it to stop working."

Philipp Bleek went along and suggested that elements of CBW appealed to the radical environmentalists, possibly more than to other groups. "It's often the case that CBRN attacks cause fewer casualties than an equivalent investment in bombs and guns. Part of the appeal of CBRN is the symbolism, rather than mass destruction. Think about a plague, a natural disease that is the vector for restoring some balance in Mother Earth. For people like Deep Green Resistance the potential appeal lies in the symbolism, not because it kills lots of people but because of its nature. This attraction to biological weapons is partly what puts eco-radicals on the shortlist of actors who might possibly pose a similar terrorism threat."

Another attraction of agents like VX or *Bacillus anthracis* is the cost and time involved in cleaning up a facility. Arguably a successful attack would be one where the cost of cleaning, or opening a replacement facility, would bankrupt the life science (or whatever) company that owned it. Nobody need die per se for their goals to be met. The 'bang for your buck' with this would be radiological substances, such as caesium

123, that as STUK discovered (*CBRNe World* 2016-04) is a nightmare to clean up, even in small quantities. Yet, environmental disasters are the worst sort, and to be the group responsible for such an act would make you a pariah. Are some agents beyond the pale?

Dr Bleek agreed it was complicated. "What Zak and I debated when we were working on the paper is, could we imagine the eco-radicals pursuing radiological terrorism? On the one hand, it's an incredibly effective way to deny someone some set of infrastructure, as a little bit of radiological material is a profound nightmare to clean up, but on the other hand, it's precisely the thing that's unnatural. *Bacillus anthracis* is a different version of that, it's persistent and if you got it into a building's ventilation system that would also be extraordinarily expensive to clean up. It's all about area denial dynamics, especially for people who may not want to harm human beings, at least not directly."

Eco-extremists are often better educated than other terrorists or organised crime group members. Could we see them, for example, as a chemist/biologist for hire, and that even though they might not use something themselves they might be prepared to sell it to an affiliated group? When it comes to financing illegal activities, such as terrorism, there are some options, such as bake sales, that are closed off to you, and so you tend to find terrorist groups funding activities through narcotic deals.

We know that terrorists sometimes ally with other terrorists with different ideological predilections. Some literature also suggests that terrorists who pursue such alliances are also more likely to pursue CBRN attacks<sup>10</sup>. So what about eco-radicals? Might they collaborate with right or left-wing extremists or religiously-motivated terrorists?

Dr Bleek suggested it was unlikely. "They're much more inclined to be ideological purists so I wouldn't expect them to ally very much. Also, on average we're talking about individuals or small groups with very, very low capabilities. Some people attracted to this milieu are, as you said, more highly educated and some additional resources

could come with that. An interesting counterfactual we thought about is; what if the Unabomber's professorship had been in biology rather than maths? What kind of mischief could he have done? Kaszcynski wasn't an eco-radical, but had aspects of eco-radical thinking in his broader philosophy<sup>11</sup>.

"It's an interesting counterfactual and the answer is not automatically massive mischief. It's hard to make high quality *bacillus anthracis* and mail it out instead of package bombs. But the eco-radical milieu does draw some better educated people for sure, and on average they are a little bit better educated than some other radicalised or terrorist milieus."

Zak Kallenborn agreed: "I consider the Unabomber to fall within the eco-radical milieu, though it is a shade of grey. In some ways it makes sense to include the Unabomber with right-wing or more libertarian groups but in other ways, it makes sense to classify with eco-radicals. Historically most of the eco-radical milieu has tended to be dominated with strong elements of leftist ideas that go along with the environmental aspects. It's not just about helping the environment, it's about preserving the equality of existence and stuff like that. There's been quite a bit of disagreement within Deep Green Resistance over the role of trans people and what their position should be. It ended up with one of the founders being kicked out over the issue. Trans issues are an important social issue, but aren't necessarily core in the eco-radical sense. One of the Unabomber critiques of the current eco-radical movement was that they were less close to environmentalism because they were blending these leftist social concerns with them. We haven't had very many left-wing groups since the fall of the USSR, so we could see the eco-radicals connecting with them, but they're not there. That said, if there were more violent left-wing groups I could see some synergies.

"When it comes to right wing groups, there is some potential there, but it's probably insignificant. Historically there have been a number of examples of very right-wing eco-



*The police need to be as aware of left wing extremists as they are of the right* ©DoD

radical groups, where they treat the environment as an inherent part of the concept of a nation; so by defending an environment you're defending the nation and the people associated with it. A couple of German groups were blending Nazi-level right-wing ideas with strong environmental ideas, in that case I could definitely see a number of connections with other right-wing groups."

While not having roots as deep as right-wing terrorists, there is a considerable history of terrorism with eco-radicals, personified by the Animal Liberation Front<sup>12</sup> (ALF) and Earth Liberation Front<sup>13</sup> (ELF). Are there more modern, larger groups bubbling along, that people haven't heard of? Who's who in the league table of eco-radicalism?

"Historically it's been ELF and ALF," said Zak Kallenborn. "At the moment we're in a transition period, shifting away from that. The big group I bang on about is Deep Green Resistance which I find very concerning. Even though they haven't engaged in violence yet I think the markers are there and their strategy

is very well thought through. They're drawing on US military doctrine on counterinsurgency, particularly where they say we endorse violence but only as part of the broader goal - it's very strategic violence. They recognise that violence is an instrument and ultimately they're aiming at a bigger change. They have a four-part decisive ecological warfare strategy, where they start out just networking and building awareness and then step four is breaking down the industrial system and destroying things.

"They also blend strong elements of anarchy, where ALF and ELF had very strong leftist elements, which, to return to the previous point, sometimes distracts from what they're doing. Anarchist elements are much more focused on 'let's destroy the system because it isn't working.' Given the rise of climate change and the attendant fears of mass harm to broad society from migration movements, to rising water levels, that makes sense. Destroying critical infrastructure compared to saving all humanity fits

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with their ideology and that makes their ethos particularly concerning.”

Philipp Bleek concurred and suggested that such attacks take greater planning and perseverance than just hiring a van and ploughing into innocents. “One of the characteristics that’s concerning in actors is patience. A lot of terrorists are very impatient and the willingness to be patient is really helpful for CBRN attacks, which is also a concern about Deep Green Resistance. I can imagine a hypothetical scenario where it poses a more serious CBRN threat and that would be consistent with the foundation that’s being laid now. This group has a long-term perspective, it’s willing to invest, it’s thoughtful and strategic.”

Due to this need for patience and group cohesion in CBRN attacks how well organised are the eco-radicals generally? Are they a shifting group of ‘save the lemurs’ one week, and ‘tofu is murder’ the next? Or do they have a strict hierarchy with a messianic leader who is ready for the counter revolution and prepared to wait? Is Deep Green Resistance unique in this, or is it a model for the other groups?

“Historically most eco-radical groups have been very disorganised, particularly the animal rights groups. Many are leaderless resistance-type organisations where you go on their website and post about your action with a cool username like ‘the San Francisco Wolf’. In some cases there have been cells, a group like The Family who were responsible for a number of attacks under the ELF framework. They burned down a bunch of homes in Seattle that caused millions of dollars of damage. In terms of newer groups, I don’t have a clear sense, but Deep Green Resistance seems to be very charismatic leader driven,” said Zak Kallenborn.

With so many other groups vying for attention do they think that law enforcement give them the interest they deserve? Zak Kallenborn suggested that these groups feel that they get too much attention! “If you don’t engage in violence, it’s really easy for law enforcement to ignore what you’re doing because their priority is people being murdered right now, and not

hypothetical murder victims in 20 years’ time. I saw a story in *The Guardian*<sup>14</sup> knocking FBI law enforcement for being overly aggressive towards environmental groups, specifically citing Deep Green Resistance. Deep Green were saying: ‘We’re a normal, perfectly fine group’. A research fellow at the Brennan Center said: ‘This is just part of a pattern of behaviour where the FBI targets normal environmental groups because they don’t like them’. I felt that as these people explicitly advocate violence, it makes total sense for the FBI and law enforcement to investigate them! The story made them look like the good guys that are being targeted by the system and being victimised. It was quite fascinating.”

Much of the environmentalists’ anger is aimed at occurrences outside the northern hemisphere, like the burning of the Pantanal in Brazil or the bucolic-sounding giant Pacific garbage patch<sup>15</sup>. Is there a chance as we saw with Daesh, that western society activists could either travel to those regions to cause trouble, or that they will travel there and become further radicalised by local groups and then return home to cause outrages?

Dr Bleek felt it unlikely. “Historically, environmentalism tends to be associated with affluence, on a Maslow’s hierarchy of needs notion that until you can take care of the basic needs, you don’t have the luxury of investing in other things. At the same time much of this environmental devastation happens in places that are less developed and poorer. A lot of the potential threat actors that we’re most concerned about are affluent, educated and with access to resources. It’s an interesting question whether they might join forces with, or represent the interests of people they perceive as being discriminated against, as that’s broadly a central narrative in this movement.”

Zak Kallenborn agreed, but felt that there were exceptions. “In South America there are a number of environmental groups that have some level of radicalism. Another group I watch is Individualities Tending Towards Savagery, who also draw heavily from the Unabomber manifesto. They want to

target the industrial system and have done a number of bombing attacks against nano-scientists over concerns about the creation of the ‘grey goo’ [A hypothetical out of control nanotech bot that creates more and more of itself until it just absorbs the planet. Ed]. They have made a number of attacks in Latin America, in Mexico as well as Brazil. There’s definitely activism there and I suspect it’s a different type of activism, more about direct environmental destruction versus climate change or more abstract stuff.”

With such a broad palette of environmental targets, from fisheries to farming, it seems like there is no part of any nation that couldn’t be targeted by such groups. With the exception of isolated attacks on mink farms or specialised facilities, however, these attacks don’t seem to happen. Is there a ranking system of concern, where genetically modified organisms (GMOs), for example, tend to raise more ire than a salmon farm? Which areas or regions should be most alert to the threat from these organisations?

Philipp Bleek suggested that it wasn’t that straightforward, and most importantly it should be realised that CBRN threats from this community are even less likely than they are from other organisations. “It’s worth noting that there isn’t as much CBRN-related chatter in these milieus as there is in other milieus. For example, domestic US right-wing groups fetishise anthrax and poison gas in the context of its association with Nazi Germany. We don’t see that in the eco-radical milieu, so that’s actually a good sign. Variants of agro-terrorism are eminently possible. On the one hand, animal rights activists are deeply invested in the sanctity of life of these creatures, but on the other, associates of People for the Ethical Treatment of Animals (PETA) have often espoused the notion that suffering animals would be better off dead. There have been efforts to euthanise household pets because they’re perceived as suffering but also factory animals of various kinds. I certainly think a GMO grain or a Monsanto seed stock being targeted is eminently plausible.”

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Zak Kallenborn affirmed that it was hard to pick at-risk communities. “Spreading a bio agent among crops is definitely of interest. Various types of acids for property damage have been looked at, and there are quite a few examples of eco-radical groups putting really harmful acid in a logging company’s offices to cause damage. In terms of agents of interest we can pretty easily rule out nukes, it makes no sense from their ideological viewpoint. Bio is more interesting, especially more natural types of harm, such as introducing a species. In 1989 a group called the Breeders released a bunch of medflies<sup>16</sup> in California and caused some serious crop destruction. I’m not aware that the group did anything after that, so it may have just been some angry guy who framed his attack as an eco-radical thing. Much of it is hoaxes and that’s where you see the chatter.

“Animal rights groups claimed that they poured acid into some Kiwi mink oil that would not only destroy the leather in the shoe itself but would also cause pretty severe burns to skin<sup>17</sup>. It’s not clear that they actually did that but it led to a multimillion-dollar recall even so. I’m not aware that they’ve crossed the line to more significant CBRN attacks, but there certainly seems to be potential.”

Dr Bleek suggested that law enforcement should not immediately rush out to buy hemp-based undercover outfits. The threat is still very low and should be considered as such. “If you told me that a really consequential

CBRN terrorism attack happened and asked, who could have perpetrated it, eco-radicals would belong on the list. That doesn’t mean I lose a huge amount of sleep about the eco-radical CBRN terrorist threat, or for that matter CBRN terrorism more broadly. One of the reasons we wrote this paper was my experience in Washington, DC think tank circles, and eco-radicals came up quite a bit in brainstorming conversations about potential CBRN threat actors. Yet we felt there wasn’t a systematic analysis of this potential threat and so that was our core motivation for this paper.”

Both gentlemen felt that the threat might be declining in the US due to the change in administration. Trump’s climate change denying, as popular as it was with his base, drove many environmentalists around the world wild. Whether Biden achieves any more in real terms than the previous administration is another matter, but at least the rhetoric has changed. This they felt would have a positive effect in the next three to five years in terms of eco-terrorism. “Law enforcement needs to remain aware of these groups, figuring out how they work and increasing monitoring activities,” said Dr Bleek. “The new administration will be a big factor in this, and is clearly making climate change a higher priority. That could draw away some elements of support as they believe the institution can do things and work to make things better.”

Zak Kallenborn sounded a note of

caution. “Many like Deep Green Resistance believe that the typical climate policies won’t fundamentally work. They frame it as green capitalism, where you’re buying hybrid cars, which isn’t really helping because you’re still supporting an inherently extractive industry wiping away limited planetary resources. I suspect a wedge will emerge between radical groups and those that are willing to see what happens with the Biden administration. It will be interesting to observe how those separate and how that goes forward. But for law enforcement, monitoring, being aware of the threat and understanding how it evolves are particularly important.”

It is too early to say, but it will be interesting to see how Covid fits into this. There is little doubt that humanity’s incursion into the environment is bringing out pathogens that we have never hosted before. Equally the potential of gain of function work, in laboratories that are already disliked because of animal testing, to have a role in Covid might bring more angry people into their orbit. Currently millions are just surviving, trying to ensure they make enough money to put the basics on the table. When there is a pause in that, when people have a chance to ask: ‘Was there anything we could have done to prevent this?’ it might well be that radical eco-terrorism gets a bit of a Covid bounce. It’s too soon to say as yet, but for law enforcement to understand these groups will only help, whether or not they hitch their wagon to the Covid horse.

<sup>1</sup> <https://www.tandfonline.com/doi/abs/10.1080/1057610X.2018.1471972?journalCode=uter20>

<sup>2</sup> <https://www.njhomelandsecurity.gov/media/podcast-avatars-of-the-earth-eco-radicals-and-cbrn-weapons>

<sup>3</sup> <https://pubmed.ncbi.nlm.nih.gov/20812795/>

<sup>4</sup> <https://www.ers.usda.gov/topics/crops/sugar-sweeteners/background/>

<sup>5</sup> <https://deepgreenresistance.org/>

<sup>6</sup> [https://en.wikipedia.org/wiki/Individualists\\_Tending\\_to\\_the\\_Wild](https://en.wikipedia.org/wiki/Individualists_Tending_to_the_Wild)

<sup>7</sup> <https://www.nytimes.com/1972/01/19/archives/2-youths-charged-with-plot-to-poison-water-of-chicago.html>

<sup>8</sup> <https://www.vice.com/en/article/kzp4n9/wild-wild-country-netflix-salad-bar-bioterror-attack>

<sup>9</sup> <http://www.animalrightsextremism.info/animal-rights-extremism/existing-groups-campaigns/stop-huntingdon-animal-cruelty-shac/>

<sup>10</sup> <https://www.tandfonline.com/doi/abs/10.1080/1057610X.2012.648156>

<sup>11</sup> <https://nymag.com/intelligencer/2018/12/the-unabomber-ted-kaczynski-new-generation-of-acolytes.html>

<sup>12</sup> <https://animalliberationpressoffice.org/NAALPO/>

<sup>13</sup> <https://www.earthliberationfront.com/>

<sup>14</sup> <https://www.theguardian.com/us-news/2019/sep/23/revealed-how-the-fbi-targeted-environmental-activists-in-domestic-terror-investigations>

<sup>15</sup> <https://www.nationalgeographic.org/encyclopedia/great-pacific-garbage-patch/>

<sup>16</sup> [https://en.wikipedia.org/wiki/1989\\_California\\_medfly\\_attack](https://en.wikipedia.org/wiki/1989_California_medfly_attack)

<sup>17</sup> <https://animalliberationpressoffice.org/NAALPO/2013/11/14/2539/>