

Chapter 8

Oil Production, Climate Change and Species Decline: The Case of Norway

Ragnhild Sollund

Introduction

In this chapter, I discuss causes for and consequences of climate change, concentrating basically on species decline. With a temperature increase of 2–3°C, between 20 and 30% of the earth's species risk going extinct. In the northern hemisphere species at risk include the polar fox, which I return to, the polar bear, various seal species, a great number of fish stocks and sea birds, such as *Lomvi*. When locally situating consequences of climate change, I find it justified also to locally situate *causes* for climate change and their relation to carbon emissions. This is done in the specific Norwegian context and in light of the ideology underpinning the developed oil industry in Norway, as it is motivated by short- and long-term financial gains. The chapter therefore starts by briefly outlining the Norwegian part of the global oil industry, before turning to some selected harmful effects of this industry related to global warming.

From the point of view of speciesism (see Sollund 2012), the chapter further discusses how a threatened species—in this case, the polar fox—is “saved” from possible extinction in ways that include sacrificing the well-being of individual foxes.

Norway as an Oil-Producing Nation

Norway is an oil and gas producing country. The oil industry in Norway started when it was found exploitable oil resources in the North Sea in 1969. In a ranking of the states in the world with most oil resources, Norway is listed as number 17. According to the Norwegian Ministry of Oil and Energy, Norway is number five of

R. Sollund (✉)
Department of Criminology and Sociology of Law, University of Oslo,
P.O. Box 6706, Oslo 0130, Norway
e-mail: ragnhild.sollund@jus.uio.no

the most oil exporting countries in the world, with exports amounting to nearly 2.5 million barrels per day. The oil industry has been of huge importance in the development of the Norwegian welfare state and the total amount of the Norwegian oil resources is estimated to NOK¹ 8,000 billion. Roughly 3,000 billion NOK is so far invested in the State pension fund, half a million NOK per inhabitant. The Ministry of Oil and Energy states at its web page²: “The total recoverable petroleum resources on the Norwegian continental shelf (NCS) are estimated at some 13 billion standard cubic metres of oil equivalents (*scm o.e.*). There is a high degree of uncertainty in estimating this, and so the total resources are calculated to be somewhere in the interval between 10.6 and 16.9 billion scm o.e. Of these resources, 35% are already sold and delivered, and the remaining 65% are distributed as follows: 28% are proven resources, 11% are contingent resources yet to be decided for development, and 26% are undiscovered resources”.

There has been a long public debate about the prospects and consequences of the oil industry, not the least in terms of environmental harms for the fishing industry from which Norwegian vessels delivered 2.7 million tonnes of fish, crustaceans and molluscs in 2010, up 6% compared with 2009. The landed value amounted to NOK 13.2 billion, up 17% from the previous year.³ Due to the cultural and economical importance of the fishing industry in Norway, in combination with the worries provoked by the BP disaster in the gulf of Mexico in April 2010, The Norwegian government agreed to postpone plans about further oil drilling in the vulnerable parts of Lofoten and Vesterålen in Northern Norway in the spring of 2011, because of the important populations of fish, not the least cod, in this area.

A significant part of the CO₂-emissions in Norway come from the Norwegian continental shelf. According to the Norwegian oil directorate, in 2010, emissions from petroleum activities amounted to 12.6 million tonnes CO₂. This is a small increase from 12.4 million tonnes the previous year. Greenhouse gas emissions from oil and gas activities have been relatively stable over the past 10 years.⁴ Most of the emissions come from gas burning in turbines. The drilling and oil and gas production also entails emission of polluted water and chemicals into the sea, endangering marine life with serious long-term effects.⁵

¹Norwegian kroner. Hundred NOK is €12.89.

²http://www.regjeringen.no/nb/dep/oed/tema/olje_og_gass/norges-olje-og-gassressurser.html?id=443528. Accessed 17 July 2011.

³Parallel with the development of the oil industry, those living from fishing have declined in numbers from 68,000 in the 1950s to 10,000 today. (Statistics Norway 2011: http://www.ssb.no/english/subjects/10/05/fiskeri_havbruk_en/). Parallel to this development there has been a huge increase in fish farming, predominantly salmon, which now constitutes 90% of Norwegian fish export. The detrimental effects fish farming has on the environment, on the wild salmon stocks and also in terms on individual abuse and suffering should be subject to attention at another occasion.

⁴<http://www.npd.no/en/news/news/2011/oil-and-gas-industry-emissions-and-discharges-2010/>. Accessed on 18 July 2011.

⁵http://no.wikipedia.org/wiki/Petroleumsvirksomhet_i_Norge. Accessed 18 July.

The Norwegian oil company Statoil, of which the Norwegian state has 67% of the shares, is also involved in the highly polluting oil production associated with the Alberta tar sands in Canada. According to Greenpeace, this oil production threatens water resources and animals, creates conflicts with indigenous groups and releases 13 times more carbon emissions than ordinary oil production. Greenpeace and the World Wildlife Foundation thus suggested in the annual shareholder meeting in May 2011, that Statoil withdraw from the tar sand oil production in Canada, but the state voted against, and the production continues.

Buying Free from Guilt

With the extensive amount of carbon emissions from the oil industry, Norway as a nation greatly contributes to global climate change. Maybe because of this, the Norwegian government is supporting measures to reduce carbon emission caused by deforestation, which again is often caused by illegal felling and trade in tropical timber, bad government in forestation and corruption, as well as civil wars (See Boekhout van Solinge 2008a, b). Norway thus partakes through financial support to the Multi Stakeholder Forestry Programme which was initiated by the British Ministry for International Development. Norway supports projects focusing on the financial structures facilitating illegal deforestation in Indonesia and Brazil, forest management and legislative measurements and law enforcement to prevent illegal deforestation.⁶ Norway has agreed to contribute with three billion NOK (\$US550 million) per year to reduce emissions from deforestation and forest degradation in developing countries, like Indonesia, where the Norwegian government for example contributes with 35 million NOK in a project against deforestation in Papua New Guinea. Three countries are main recipients of the Norwegian aid against deforestation: Indonesia, Brazil and Guyana. Between 2008 and 2010, NOK 55 billion of the state budget so far has been dedicated to prevent deforestation, however only 293 millions were actually paid out and the remaining approximately 90% of the money is still in bank accounts in Oslo and Washington (Mjaaland et al. 2011). Indonesia has been promised six billion, of which only 185 million so far have been paid out through UNDP. The reason for this inertia is the political situation in receiving states and that the Norwegian government wants to secure that the money is used according to its intention.

Although such contributions may appear invaluable in preventing deforestation, which in addition to carbon emissions and entailing climate change also produces habitat loss and species decline, Norway may be critiqued for polluting with one hand, and making remedies with the other. As observed by Nigel South (2008, p. 191):

[In response], one fashionable and guilt-saving strategy promoted by western nations had been the idea of buying tropical rainforest to preserve it and reduce destructive develop-

⁶http://www.regjeringen.no/en/dep/md/tema/internasjonalt_miljosamarbeid/miljosamarbeid-med-utviklingsland/miljogovsamarbeid-med-indonesia/klima-og-avskoging.html?id=464171. Accessed at 18 July 2011.

ment. However, backed by Survival International, representatives of the Yanomami tribes have argued this trend “is linked to health and social crisis among indigenous people, including sickness, depression, suicide, obesity and drug addiction”

The Norwegian Prime Minister Jens Stoltenberg’s engagement for carbon emission quotas can be criticised for being a rich country’s way of legitimating its own pollution. In 1991, Stoltenberg and Norway took the initiative to trade in climate quotas, which is an important part of the Kyoto agreement, through CDM: Clean Development Mechanism, whereby developed states which must reduce their own carbon emissions can avoid this by financing the development of pure energy production and other climate projects in developing states.⁷

The Norwegian government has dedicated NOK four billion to buying quotas. The Norwegian goal thereby is not to reduce the country’s own carbon emissions, but to fulfil the obligations in the Kyoto agreement through purchasing quotas on the international market. By buying quotas the Norwegian state can make rationalisations for its own carbon emissions, and the ways in which this is part of a capitalist ideology which is not sustainable in environmental terms. Further, by the focus on “economical development” one increases consumerism and exploitation, i.e. related to the meat industry and textile industry in developing countries from where Norway imports clothing.

Norway is greedily extracting oil resources with one hand and trying to buy the Norwegian state free from guilt by the economical means financed through the oil and gas production, whether in Norway or in other state where Norway is involved through Statoil, e.g. Brazil. Maybe, the Norwegian state could rather apply what Rob White (2011) suggests; namely horizon scanning. What will be the *consequences* of extracting all resources now in such a hurry only to keep the money in bank deposits and shares world wide? Would it not be a better solution to leave the resources where they are, for future generations, to prevent the harm entailed by the oil production at present and in the future? White (2011, p. 32) thus underlines the importance of looking *beyond* the near future to see those issues and trends most likely to involve environmental crime. He says that horizon scanning as an intellectual exercise and planning tool can provide insight into threats and actual and potential problems which at present are poorly recognised, and thus to find ways to mitigate problems.

Norway’s Indirect Contributions to Environmental Harm and Carbon Emissions

This question must also be seen in perspective of how the money gained by the oil production/extraction is invested. In addition to securing development and the Norwegian welfare state, as mentioned roughly NOK three billion is invested in the Norwegian Government Pension Fund—Global. The State Pension Fund has been criticised for investing in a large number of unethical companies, in addition to

⁷<http://avis.dn.no/artikler/avis/article7361.ece>. Accessed 18 July 2011.

lending money to states where human rights are not respected. According to Attack Norway, the reason for the investment in controversial companies is simple. Profit has always been the explicit goal of the State Pension Fund, independent of the consequences for humans and the environment. The establishment of an Ethical advisory board in 2004 has, still according to Attack, not changed this (Gausdal 2010)⁸. Bellona, a leading environmental organisation in Norway, has also criticised the State Pension Fund for preserving and prolonging a situation causing global warming through its investments. They say:

Currently, the Fund helps to maintain “business as usual” by investing in resource-intensive companies and businesses. Rather than acting as an agent for change, the Fund’s investments in companies that are materially contributing to global warming and natural resource depletion help preserve the status quo and escalate our challenges. By maintaining such investments, the Fund becomes a de facto supporter of global warming and the damage it causes. (Hauge et al. n.d.)⁹

The Norwegian State Pension Fund has for example been criticised for buying shares in companies which are responsible for illegal deforestation. According to the Norwegian section of the Rain Forest Foundation, the Norwegian State Pension fund has made investments in oil companies such as Repsol, Occidental and Chevron, the foresting companies, Samling and Olam and the palm oil company Wilmar International. More than NOK two billion have been invested in Repsol, which has been heavily criticised for abuse against extremely culturally and physically vulnerable indigenous groups in Peru and Ecuador.¹⁰ Chevron was in February this year in an Ecuadorian court convicted to pay USD 8.6 billion in damages, 860 million of which is to be paid directly to the Amazon defence coalition, the group formed to represent the plaintiffs.¹¹

In addition to the long-term effects of global warming caused by the Norwegian part of oil and gas production, oil production entails dispute and conflicts over land rights in Canada, and indirectly through the oil derived financial investments, e.g. in Chevron and Repsol; Norway is also responsible for the displacement of indigenous people. These crimes/harms are definitely a breach with environmental and human rights, and also combine harms/crimes of pollution with other harms against people, and the environment (South 2008). To further follow White (2008, 2011), this is incompatible with ecological justice, “in which; ecological citizenship acknowledges that human beings are merely one component of complex ecosystems that should be preserved for their own sake via the notion of the rights of the environment” (White 2012). In addition to these harms caused by oil production where the Norwegian State Pension Funds has part of its investments, there is the destruction of habitat for a great

⁸<http://arkiv.attac.no/nyheter/omskogotraer/>. Accessed on 26 July 2011.

⁹http://bellona.org/filearchive/fil_bellona_statement.pdf. Accessed on 26 July 2011.

¹⁰<http://www.regnskog.no/hvordan-vi-jobber/forbrukersp%C3%B8rsm%C3%A5l/trekk-ut-olje-fondet>. Accessed 22 July 2011.

¹¹<http://www.energydigital.com/sectors/chevron-texaco-lawsuit-ecuador-court-rules-environmental-damages>. Accessed 20 July 2011.

number of species which live in the rainforests, thus causing species going extinct, loss in biological diversity and ecological degradation. The focus in the following section is, however, on the indirect consequences of oil production in terms of climate change, which in turn causes the destruction of habitat for a number of species, in the Norwegian, local context.

Local Consequences of Climate Change: Species Decline

At a local, national level, climate change endangers several species in Norway, as seal and whale species and the polar fox, which is of specific interest because of the counter measures set in to prevent the extinction of this species. Species become endangered e.g. as a consequence of lack of suitable living areas and competition with spreading species, as when the polar fox is displaced by the red fox. In addition, living conditions for the polar fox are affected by the access, or lack of access to prey, as lemmings, which is climate dependent. Lemmings normally came in great numbers with regular intervals; however with the exception of this year—2011—this has not happened since the 1990s. The reason is that mild winters deprive them of a place to live and breed as they live under the snow where they feed on moss.¹² When the snow gets too heavy they cannot produce the tunnels they depend on in the snow. The polar fox in Norway is critically endangered, from 1998 to 2008 there were in total 241 breeding litters in Norway *and* Sweden, of which 111 were in Norway. In 2009, no breeding litters were documented in Norway, as there was a collapse in the population of small rodents and lemmings in Norway in 2008 and 2009. The great decline in the number of polar foxes in Norway led to measures being made in an attempt to save the species by The Norwegian Directorate for Nature Management, through a breeding programme ran by the Norwegian Institute for Nature Research (NINA).

The Polar Fox Surveillance and Breeding Programme

The project was started in 2003 and includes counting and surveillance, including genetic surveillance, of the nests of the polar foxes in Norway, and also a breeding programme through which polar foxes are bred in captivity and the cubs are placed in nature (Eide et al. 2008). The breeding programme for polar foxes was established in 2005 to re-establish, strengthen and tie together Scandinavian populations of polar foxes and to increase genetic exchange and counteract genetic isolation.

¹²<http://www.newscientist.com/article/dn19982-plagues-of-lemmings-driven-by-winter-breeding.html>. Accessed 18 July 2011. <http://www.forskning.no/artikler/2011/januar/276398>. Accessed 18 July 2011.

There is a breeding station from which cubs are introduced and the programme relies on capturing cubs in nature from the Scandinavian groups to breed on them. So far in 2011, nine litters with polar foxes have been born, all together more than 85 cubs on Dovrefjell.¹³ NINA has since 2007 set out 76 cubs in Dovrefjell which have been bred at the breeding station in Oppdal. In 2010 the first litters of free born cubs were born since the project started, and altogether 39 cubs divided on five litters have been born. The project manager at NINA attributes the success to a combination of the food stations for the polar foxes which have been established, and the good lemmings' year.

Despite the success in reintroducing the polar fox species to Dovrefjell where it had been extinct for nearly a hundred years, the programme has also been subject to critique, due e.g. to the mortality rate of the released foxes. The research team says in their annual report from 2010 (Landa et al. 2010) that of the 87 animals which have been released during the years 2006–2009, only a total of 56 of these animals were found in the collected data within the first year after release, and 32 of these remained in the data collected during 2010. This may indicate that more than half of the released individuals have died. Only 26 of the 38 animals released in 2009 were found in the data collected in 2010. Two of the “recaptured” animals are definitely confirmed dead. According to the researchers, the foxes are hard to track as they wander, and when and how they die can be hard to establish, despite them being collared.

Species Survival Versus Animal Abuse: Speciesism

As the foxes which are released depend on humans to feed them and are bred in captivity, an interesting dimension worthy of discussion appears: Is the programme really reintroducing a wild species into Norwegian nature, or is it, despite of the efforts in collecting genetically varied breeding pairs, rather introducing semi-domesticated animals which depend on humans for survival into Norwegian wilderness where the mortality risk is high?

Critique has thus been raised against the programme by animal welfare organisations¹⁴ for putting animals out to suffer and die, thereby seeking to ensure species survival rather than protecting individuals. The Animal welfare alliance finds that the entire project is based on animal abuse, claiming that 50–75% of the animals will die, as they have not been socialised into survival in the mountains. The researchers' response to the critique is that despite the survival of only 25 individuals in 2008–2009, the high mortality was caused by the lack of small rodents which also caused all free

¹³<http://www.nina.no/Aktuelt/Artikkel/tabid/945/ArticleId/1451/Historisk-mange-kull-med-fjellrev.aspx>. Accessed 18 July 2011.

¹⁴http://www.njff.no/portal/page/portal/njff/nyhet?element_id=101099931&displaypage=TRUE. Accessed 19 July 2011.

born litters to die. However; this may again question the viability of the programme; as the main reason why rodents fail to breed, at least in the case of the lemmings, is mild winters and lack of snow, and despite of the claimed success of the breeding programme, the foxes will continue to depend on humans for survival.

The project has further been criticised for the killing of wild polar foxes which lived at Finse. The reason why the animals were killed was that this group had mixed with escaped farm foxes, and consequently, was genetically “impure”. Despite protests, for example by the Council for Animal Ethics, the animals were killed.¹⁵ This decision made by the Ministry of Environmental affairs seems paradoxical when the project also puts much effort in capturing wild animals from different populations in order to achieve genetic variation. In this case at Finse, the foxes themselves had managed both to secure genetic variation as well as species survival, which is the explicit goal of the breeding programme. In order to achieve this, however, a number of foxes from the critically endangered species have been caught through painful, abusive methods, and have later died in captivity because of stress. The “genetic impurity” of the Finse group was actually discovered when they were caught to provide breeding material for this part of the project.

From an individual perspective, for a cub to be released into the mountains where s/he will suffer from starvation, will entail suffering, and as shown often, death. To follow Piers Beirne (1999, 2009) in his discussion of animal abuse, such acts should be acknowledged as abusive and painful, and thus meriting the same attention which is directed to abuse when humans are the victims. Such abusive acts against non-humans cannot be disconnected from speciesism—the practice and ideology of systematically discriminating other species, most often for some kind of human benefit (e.g. Singer 1995; Regan 1983; Nibert 2002; Noske 1989). Speciesism should not exclusively be understood as discrimination against non-human species, but more importantly against the *individuals* of non-human species. The acts directed to many of the individual foxes through the Norwegian breeding programme, can be characterised as speciesist abuse, as humans through the project physically and mentally harmed the animals through captivation of former free individuals and also through the release of those being captives, for human defined purposes. As more than 50% of the released cubs died, as well as several of the initially caught foxes, they were also victims of theriocide (the animal equivalent of homicide) (Beirne 2007, 2008). One aspect of this is for example that the individuals which were released were labelled with collars in order to identify them, with the harmful effects this has for the individual which must wear it. The researchers take blood samples of the foxes, with the anxiety this must entail for a fox who is not accustomed to humans. Research on wolves which are subject to the same kind of procedure shows in this respect that wolves who have once been subject to human examination and labelling, for ever will try to avoid their human molesters (Tønnessen 2010). This form of control over “wild” animals is abusive and part of speciesist practice, something

¹⁵The Council for Animal Ethics is an independent advisory body appointed by the Ministry of Agriculture and Food in collaboration with the Ministry of Fisheries and Coastal Affairs.

which becomes evident if one imagines putting humans in a similar situation. Cazaux (2007) finds for example that the collars often directly and indirectly can influence on the collared animals' chances of survival, and not the least, well-being. She says: "As the mere presence of humans—however low profile this might be—potentially influences the animal's life in a harmful way, handling them and marking them can derivatively be presumed to have a negative impact on their lives" (Cazaux 2007, p. 101).

The Directorate for nature management in Norway is not a green movement, but part of the state apparatus. One of the aims of the Directorate is, however, to secure biological diversity and thus that Norway acts in accordance with the Convention of biological diversity and the Berne convention, both signed by Norway. As for green movements, the logic is to secure *species* rather than individuals, and Norwegian authorities can thus also be criticised for being anthropocentric, in ignoring individual well-being and inflicting animals with harm and in advancing human interests for preserving the polar fox as a "wild species".

Svärd (2008) has shown how green movements often can be accused of speciesism, as for green movements other animals have value as *species*, not as individuals. He states that environmentalists and conservationist NGOs as representing the extra-parliamentary leg of the Green movement have focused their attention on other animals mainly on a species basis, and not based on individual animal rights, as these are advocated for example by Tom Regan (1983). The species category disguises that animals are individuals with individual rights and the rights view does not recognise the moral rights of species to anything, including survival (Regan 2004, p. 359, here in Svärd 2008, p. 172). In such analysis, the species category is but an analytical, zoological category and as such, cannot be hurt or harmed. As a species goes extinct however, this is often the consequence of individual suffering on an accumulated level, for example when individuals die of starvation, for example when they cannot find food due to species decline caused by climate change.

Species Justice and Individual Animal Justice

This implies that a species cannot only be reduced to an analytical category, and animals cannot be reduced to being only part of a species, but must be perceived as individuals. In contrast to green movements, and the logic to be found for example in the CITES convention, through which it is clear that non-human species have not individual rights, but only rights as part of a species, Svärd underlines: "From an animal rights perspective, nonhumans are entitled to concern and respect as individuals, and this entitlement may never be dependent on the remaining size of the rights-holder's [a species] group" (Svärd 2008, p. 172). However, practices which threaten and harm individual rights, as a consequence may also threaten the survival of species, though it is not the species' rights which should be prioritised, but the individuals which together form a species. Species rights, should thus be seen as a prolongation of individual rights, rather than just seeing individuals as categorical representatives

of a species, as in the CITES convention, when referring to individuals as “specimens” (Sollund 2012). Species justice may be the outcome of individual justice, the opposite is not necessarily guaranteed. When individual animals’ species dependent needs are met, and individual harm is not inflicted, than species may survive, and species justice can be accomplished.

One question is whether species justice (not individual justice) can be accomplished when the species can survive only by means of “artificial” feeding from humans, and through human orchestrated breeding programmes and under human control. Can the species at all be claimed to survive within the frames of this species natural characteristic feature, abilities and needs, when individuals become dependent of and accustomed to, human assistance, somehow turning them into patients? Maybe, as a consequence, one could claim that the species then cease being this particular species, as only the genetic “material” remains, and not the animals’ historically constituted practices, such as those related to food hunting. And again, as the species is compounded by individuals who suffer from this kind of deprivation of liberty and painful measures, turned them into someone different from those they should have been. Consequently, may such measures made for species preservation thus be in vain and counteracting their intention? A question to follow is also, is it at all fruitful to talk about species justice as a phenomenon as long as a species (in some form) can survive, despite or maybe even only by means of the infliction of harm directed to this species’ individuals? In short: Can justice be done to a species, when harm is inflicted on the individuals forming the species on a systematic level?

This can be seen in White’s perspective as he categorises individual animal rights and species justice as interdependent, when listing these two phenomena as one of the broad approaches to justice identified in green criminology: “in which environmental harm is constructed in relation to the place of non-human animals within environments and with their intrinsic rights to not suffer from abuse, whether this be one-on-one harm, institutionalised harm, or harm arising from human actions that affect climates and environments on a global scale” (White 2011, p. 23). This also echoes Beirne and South’s perspective of green criminology stating that it is difficult to disentangle environmental harms from the abuse of non-human animals. “Animals of course live in environments and their well-being—physical, emotional, psychological—is absolutely an intimately linked to the health and good standing of their environments” (Beirne and South 2007, pp. xiii–xiv).

In this perspective, the killing of polar foxes on Finse because they had wrong genes can be defined as a breach of individual rights, and consequently a breach of species justice as well as environmental harm, as polar foxes are part of the environment. In my opinion, a distinction must however be made between those harms which are directly inflicted upon individuals, and those which are the indirect consequences of e.g. pollution, climate change, deforestation and loss of habitat.

This became particularly salient as the theriocide of the Finse group followed the logic of a eugenics programme when directed to humans during the Nazi period. In regarding the Finse group of polar foxes as contaminated by the farm foxes, it becomes evident that the farm foxes are inferior to the “wild” polar fox, and therefore must be exterminated, except in the farm cages where they are kept to “produce fur”.

The alienation by the humans necessary to commit the atrocities of encaging wild animals is interesting in a speciesist perspective per se (see Sollund 2008). However, this case is also interesting because it appears that it was the “wildness”—the absence of genetic “contamination” of the “genuine” polar fox—and thus also the absence of human influence and contamination through breeding programmes and incarceration of the “farm polar fox”, which give the “wild” foxes their value, and not, of course, the inherent value of sentient beings with proper interests and rights. This is also interesting as it is through fox eugenic programmes that the “fur fox” is cast in his/her victim role, whereas the “wild fox” ironically and paradoxically also through breeding programmes, shall be preserved as a “wild species”. Consequently; it is the way the foxes in different forms provide “a good” for humans, either in financial terms, as “fur” or for recreational purposes as a “token of nature and wilderness”, that makes it possible to breed them in different directions, though interrelated as they are both subject to human control.

As the Nazis ranked human “races”, and white, male humans have categorised races and sexes according to their value based on different kinds of measurements, e.g. of their brains and the placement of their navel (Gould 1981) the Norwegian fox researchers determined that because of the “contamination of their genes” the foxes should die. In this, they performed a “double speciesist act” of theriocide. Not only could they, as humans, determine that the foxes should die, but they would also rank the different fox breeds according to their “wildness genes” and thus their genuineness and consequently kill those regarded as worthless, precisely because of the human regime they had been subject to.

Conclusion

In this chapter, I show the harmful effects of legal activities which raise questions for further discussion, in terms of how such harms should be met. I show the inter-relatedness between the exploitation of oil resources in Norway and their direct and indirect harmful environmental consequences. I further assess the seeming incompatibility of making further profit from the oil industry by making investments through the Norwegian State Pension Fund in international, capitalist enterprises, e.g. in the oil sector on one side, and the preservation of the environment, the respect for human as well as animal rights on a global level on the other. As the production of oil and gas entails carbon emissions to a high degree, the indirect long-term consequences can already be visible in terms of climate change in Norway, which in turn affects the survival of a number of species, exemplified by the polar fox. An anthropocentric stand to this is seen through the attempts to secure species survival of the polar fox, whereby disrespecting individual animal rights through the theriocide of unwanted animals with “impure genes”, and breeding programmes leading to semi-domestication of the foxes. This example shows an approach that takes into account only the survival of the species and shows that who merits to be reckoned as part of a species worth of protection is determined by humans and is

also under human control. The actions involved in such an approach are anthropocentric and speciesist. This suggests that rather than just regarding the species as a *category* worthy of protection, one must start by the respect for the individuals compounding a species. In order to do justice to a species, one must take into account the environmental, social, physical and psychological needs of individuals with similar needs and features, those comprising a species. The best way to achieve this is quite simple: To stop the destruction of habitat which deprives non-human “wild” species of the natural conditions they need to live and breed, and allow the individuals of each species a life in freedom, free from human restrictions. Regarding domesticated species, they should not be regarded as means to an end, but valued as individuals with personal needs and desires according to their species’ needs. Imprisoning animals is not according to their needs and incompatible with species justice. An unrealistic utopia which would be the consequence of genuine species justice would therefore be to abstain from practices which depend on the exploitation of other animal species. In the meantime, a minimum for the animal slaves would be to allow them necessary space, adequate food and access to fresh air and offspring.

This chapter would invite to further examination of environmental harms caused by states’ and corporations’ legal actions, to assess harms and how these can be counteracted, and to further develop the theoretical framework of green, eco-global criminology. One issue which should be subject to further attention could for example be how to operationalise terms such as environmental justice, ecological justice and species justice (White 2008, 2011). Does it for example make sense to talk about species justice when referring to humans, or do we when regarding the human species only find it relevant to talk about human rights? And if so, could this approach, if applied to other species also lead us to give them justice? One dimension of this could be to further examine the ways in which different aspects of green crimes interrelate, such as the disrespect of human, animal and ecological rights, which can be hard to disentangle from racism, speciesism and anthropocentrism.

References

- Beirne, P. (1999). For a nonspeciesist criminology. Animal abuse as an object of study. *Criminology. An Interdisciplinary Journal. The official publication of the American Society of Criminology*, 1, 117–150.
- Beirne, P. (2007). Animal rights, animal abuse and green criminology. In Beirne, P., & Nigel, S. (eds.), *Issues in green criminology*. Devon Willan, 5587.
- Beirne, P. (2008). *Confronting animal abuse. Law, criminology and human-animal relationships*. Rowman and Littlefield.
- Beirne, P. (2009). *Confronting animal abuse*. Lanham, MD: Rowman and Littlefield publishing.
- Beirne, P., & South, N. (2007). Introduction to green criminology. In *Issues in green criminology. Confronting harms against environments, humanity and other animals* (pp. xiii–xxii). Devon: Willan Publishing.
- Boekhout van Solinge, T. (2008a). Crime, conflicts and ecology in Africa. In Sollund, R. (ed.), *Global harms ecological crime and speciesism* (pp. 13–35). New York: Nova Science Publishers.

- Boekhout van Solinge, T. (2008b). The land of the orang-utan and the bird of paradise under threat. In Sollund, R. (ed.), *Global harms ecological crime and speciesism* (pp. 51–71). New York: Nova Science Publishers.
- Cazaux, G. (2007). Labelling animals: non-speciesist criminology and techniques to identify other animals. In *Issues in green criminology, confronting harms against environments, humanity and other animals* (pp. 97–114). Devon: Willan Publishing.
- Eide, N. E., Øystein, F., Roy og Landa, A., & Arild. (2008). *Fjellrev i Norge 2008. Resultater fra det norske overvåkingsprogrammet for fjellrev. [Polar foxes in Norway 2008. Results from the Norwegian surveillance program for polar foxes.] Norsk institutt for naturforskning. (NINA) Rapport 389.*
- Gausdal, L. (2010). Om skog og trær [About forest and trees] *Dagsavisen* 20.12.2010.
- Gould, S. J. (1981). *The mismeasure of man*. Baskerville: Penguin.
- Hauge, F., Birgitte, L., & Eivind, H. (n.d.) *Bellona's recommendations for the ethical guidelines of the Norwegian Government Pension Fund—Global*. http://bellona.org/filearchive/fil_bellona_statement.pdf.
- Landa, A., Mari, T., Roger, M., & Roy, O. A. (2010). *Avlsprogrammet for fjellrev. Årsrapport 2010*. NINA rapport 603. Retrieved 19 July from <http://www.nina.no/archive/nina/PppBasePdf/rapport/2011/603.pdf>.
- Mjaaland, O., Nils-Inge, K., & Ann, F. (2011). Millarder står ubrukt. Uenighet sinker regjeringens pengestøtte til vern av regnskogen. [Billions unused]. Disagreement delays the government's financial support to save rainforest' *Aftenposten* 19.07.2011.
- Nibert, D. (2002). *Animal rights Human rights*. Oxford: Rowman and Littlefield publishers.
- Noske, B. (1989). *Humans and other animals: Beyond the boundaries of anthropology*. London: Pluto Press.
- Regan, T. (1983). *The case for animal rights*. California: University of California Press.
- Regan, T. (2004). *The case for animal rights*. University of California Press.
- Singer, P. (1995). *Animal liberation*. London: Pimlico.
- Sollund, R. (2008). Causes for speciesism. Difference, distance and denial. In Sollund, R. (ed.), *Global harms. Ecological crime and speciesism* (pp. 109–131). New York: Nova Science Publishers.
- Sollund, R. (2012). Speciesism as doxic practice. In R. Ellefsen, G. Larsen, & R. Sollund (Eds.), *Eco-global crimes: Contemporary and future challenges*. London: Ashgate.
- South, N. (2008). Nature, difference and the rejection of harm: expanding the agenda of green criminology. In Sollund, R. (ed.), *Global harms ecological crime and speciesism* (pp. 187–200). New York: Nova Science Publishers.
- Svärd, P.-A. (2008). Protecting the animals. An abolitionist critique of animal welfarism and green ideology. In Sollund, R. (ed.), *Global harms ecological crime and speciesism* (pp. 167–187). New York: Nova Science Publishers.
- Tønnessen, M. (2010). *Ulovlig jakt på ulv* [Illegal wolf hunting] Speech at Kriminalpolitisk seminar [Criminal political seminar] University of Oslo, Dept of Criminology and Sociology of Law. 11.11.2010.
- White, R. (2008). *Crimes against nature: Environmental criminology and ecological justice*. Devon: Willan Publishing.
- White, R. (2011). *Transnational environmental harm*. London: Routledge.
- White, R. (2012). The foundations of eco-global criminology. In R. Ellefsen, G. Larsen, & R. Sollund (Eds.), *Eco-global crimes: Contemporary and future challenges*. London: Ashgate.