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RESEARCH ARTICLE

Requiem for a Junk-Bird: Violence, Purity and the Wild

Hugo Reinert

Department of Culture Studies and Oriental Languages, University of Oslo

Corresponding author: Hugo Reinert, P.O. Box 1010, Blindern, 0315, Oslo, Norway

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1. Introduction

The following is based on material from a multi-sited ethnographic research project¹ I undertook a few years ago. The project focused on transnational conservation efforts for the few remaining birds of the Fennoscandian population of the Lesser White-fronted Goose (*anser erythropus*), colloquially known as ‘Lessers’: a tiny, highly endangered population of migrant birds that breeds in Finnmark, the northernmost mainland district in the Norwegian Arctic. Every year, after the summer season, these birds depart their Arctic breeding grounds for their wintering sites in Greece. One part of the population flies directly south, passing through the Baltic and Central Europe; the other undertakes the vast and distinctive autumn loop-migration of the population—crossing Siberia to the Taimyr peninsula, then onward through Russia, Kazakhstan and Turkey before joining the others at the wintering site. Come spring, the reunited population flies north again, back through central Europe, to the north of Norway. The population is diminutive. During my fieldwork, in 2010 and 2011, the entire population could fit in a single photograph: some forty individuals, with eleven or twelve breeding pairs. Following a series of protective interventions—particularly an ongoing cull of Red Fox (*vulpes vulpes*) in the breeding areas, but also increased surveillance along the central European route and patrolling of the wintering site in Greece, to prevent poaching—their numbers have been increasing year by year for some time now. Recent estimates place the breeding population at some thirty to thirty-five breeding pairs.² Despite the increase, however, only one couple with two fledglings was observed after the 2017 breeding season.³ Particularly during the time of my fieldwork, the diminutive size of the population produced an acute sense of its vulnerability to unpredictable and random events, or stochastic disasters.

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A single poisoned lake, or one dedicated hunter, could extinguish the entire population in an afternoon—either on the spot, or by killing enough of the flock to force the population into a self-reinforcing extinction spiral. Collective scarcity is collective exposure, particularly in the disturbed and volatile environments of the Anthropocene.

Building on some of my earlier work with the Lessers,⁴ the argument in the following begins from a long-standing interest in forms of violence that erase themselves⁵—that pass under the radar as trivial, natural, mundane, necessary, invisible, self-evident or ‘normal’.⁶ In revisiting material from this project, I was concerned specifically with the kind of destructive violence that operates in (and through) the effort to save—in the act of rescue, in the attempt to do good, in the work of salvation. Such *salvific violence* plays an important but often under-examined role in conservation: a field where individuals are frequently culled, euthanized or despatched and entire populations, even entire species may sometimes be eradicated, at least locally. Conceptually, in a context given by danger and extinction, I was also haunted by the relation of such violence to the possibility of reversal: to the idea that on some level, by some means, loss might be undone, death or extinction reversed—whether individually, or at some collective level—through techniques such as de-extinction, cloning or (as I will discuss here) captive-bred reintroduction. Many questions surround such ideas of reversal, not least of which is this: what must the lost thing *have been*, or what must it be *made into*, such that it can be ‘brought back’—and still be understood somehow, in some sense, as itself? Subtle violence may be done to something (or someone) in erasing the finality of their disappearance. Let me tell you the story of A16.

2. Gosling, Interrupted

At the onset of the long northern summer of 2010, at a conservation facility in southern Sweden, a small family of Lessers—two adults and four goslings⁷—were tucked into a car and driven several thousand kilometers to the north. Their destination was a wetland on the shore of the Barents Sea, near the inland breeding areas of the Fennoscandian Lessers. Upon arrival, the goslings were to be placed in a small enclosure overlooking the grazing grounds of the wetland while the parents returned south, back to the conservation facility. When the breeding season was over and the wild Fennoscandian flock descended from the inland, the goslings would be released. The hope was that despite being outsiders, they might still integrate and join the flock of their wild cousins, follow their autumn migration and become reproductive members of the population.

For the several days of the journey, the small family slept cooped up in the back of the car, either parked by the side of the road or in garages along the way. The six of them were unusual in several ways. Genetically, they were the ‘purest’ living approximation anyone could find to the Fennoscandian Lessers. The parents had been captured in the wild, in Siberia, from the so-called Western Main population—a larger population of Lessers, distinct from the Fennoscandians, that nests in northern Siberia, in an area to the west of the Taimyr peninsula. The Western Main population counts in the tens of thousands and, as I come back to in the next section, ornithologists have established that a level of genetic exchange already occurs ‘in the wild’ between this population and the Fennoscandian Lessers. Key actors on the Norwegian side were critical of captive-bred supplementation, and opposed the experiment—primarily, out of concern for the complex negative effects that captive-bred birds might have on the wild flock. If the Fennoscandian Lessers *were* to be supplemented artificially, therefore, it was vital that the supplementing birds be selected carefully: as close as possible to the

Fennoscandian Lessers, both behaviorally and genetically, and affected as little as possible by captivity.

For reasons I come back to in the next section, a breeding program for ‘wild’ Siberian Lessers was already in operation in southern Sweden, at the conservation facility I mentioned. Once it became clear that a feasibility study was to be carried out with the Fennoscandian Lessers,⁸ to determine the viability of captive-bred supplementation, suitable birds could therefore be recruited from there. When the Siberian breeding program had started up initially, a few years before, the facility already held a sizable and long-standing population of captive-bred Lessers—but while this attested to their ability to keep Lessers alive in captivity, it was also a cause for concern. The captive-bred birds were of uncertain or compromised pedigree, and would obviously have to be kept apart from the new arrivals—but beyond this, bird experts also worried that *any* interaction with captive-bred Lessers might jeopardize the purity of the new arrivals: that if exposed to ‘unnatural’ behaviors and preferences developed in captivity, the released birds might carry these with them into the wild population and spread them. Geese learn socially, and the purity of the wild birds was more than a matter of genetics: even hearing the calls of the captive-bred Lessers might alter it. To prevent the risk of such behavioral contamination, the Siberian birds were therefore placed not only out of visual range, but also beyond hearing—in a remote and isolated corner of the park, removed not only from other birds but also other animals and, except for their handlers, human contact.

This was the compound where the four goslings had hatched and where they spent their first few weeks: isolated and monitored, under carefully controlled conditions, in an artificial environment designed as far as possible, within practical limits, to erase itself—to shield the captive birds from the effects of their captivity. The hope was that when the time came, the supplementation goslings might integrate with the tiny Fennoscandian flock with as little disruption as possible. The success or failure of the experiment would determine the future scope of captive-bred supplementation for the management of the wild Fennoscandian Lessers. Would integration occur? Would the almost-wild Lessers from Sweden, one generation removed now from the Siberian Western Main, join the Fennoscandian flock and follow them on their migration?

The goslings arrived on site as scheduled and, after a few days in the enclosure, they were released. To assist with tracking, each had been tagged with a neck-band: a black strip with white lettering, marking them respectively as A06, A16, A17 and A18. Two were also equipped with satellite transmitters: one had its transmitter attached to the neckband, the other carried a more conventional telemetry backpack. Supplemented by visual observation, the transmitters made it possible, at least initially, to follow the movements of the goslings and the flock in considerable detail. For the first few days, the wild Lessers seemed simply to ignore the new arrivals—but relatively soon, the two groups were seen grazing together. On September 14, the wild birds took flight and the Swedish goslings followed. Unexpectedly however, the combined flock then turned inland, returning to their breeding grounds for several days. One of the two transmitter birds never left this area: the assumption was it had been taken by a predator, possibly a fox. The second transmitter continued to broadcast—but disappointingly, after leaving the breeding grounds at the end of September, its gosling did not follow the Fennoscandian flock. Instead it turned south, heading back towards Sweden. Its final signal came from Finland in early November. The two remaining goslings were marked just with neck-bands, which meant that they could only be tracked visually, by observers situated along the migration route. Over the course of the autumn and winter neither of them

was seen either at the stopover sites of the Fennoscandian flock, or at the wintering site in Greece. The first generation of the feasibility study had, it seemed, been a failure.

The following year brought a surprise, however. In May, at the hide overlooking the marshes, members of the Norwegian team found a handwritten note in the guestbook. The note recorded the sighting of a Lesser with a numbered neckband. Soon enough, direct observations confirmed this. Down on the marshes, a neck-banded gosling was grazing peacefully alongside the wild flock. One of the supplementation goslings from the 2010 release had, it seemed, returned.⁹ The neck-band indicated it was A16, the female of the group—but where had she returned from? Where had she been? A16 had not been seen anywhere along the migration route of the Fennoscandian flock: her presence was unexplained, and therefore suspicious. Almost immediately, monitors noted that A16 was not displaying the habitual grazing preferences of the Fennoscandian Lessers, but seemed instead to be grazing on the wrong grass types—eating like a Bean Goose, as one monitor put it. Why was she misbehaving in this way? One possibility was that she might have attached herself to a flock from another species: the wetlands were a migratory traffic juncture that drew a range of different bird species, including a number of related goose types. A16 might well have followed one of these on their migration, learning their behaviors and preferences—and with this, importantly, she would also have imprinted on their migration route. She might have joined not just the wrong flock, but the wrong species.

Almost immediately, Norwegian monitors nicknamed her the ‘junkbird’ [*skrotfuggel*]: a derogatory name, indicating her uselessness for conservation purposes. Her first return to the marshes, in 2011, coincided with the end of my fieldwork on the project. She returned one more time, in 2012—but this time, she came accompanied by a male Lesser of unknown origin. The Norwegian team had no record of this second bird, and it had not been identified at any of the Fennoscandian roosting sites that year. There was no coming back from this. On May 23 2012, following authorization from the Norwegian Environment Agency, A16 and her male companion were both killed by an agent from the State Nature Inspectorate (SNO).

3. Names for the Beloved

An account of the killing was published a few years later, in an extensive critical review of captive-bred supplementation for the Lessers¹⁰—authored by the Norwegian team that monitored the Fennoscandian Lessers, who had managed the feasibility study and who had also, in the end, made the request that A16 and her mate be killed. Their short description of the killing is instructive:

[A16] was despatched on 23rd May 2012 by the Norwegian State Nature Inspectorate because it did not follow the wild Fennoscandian Lesser White-fronted Geese, but rather wintered in the Netherlands and Belgium. The choice of this route was undesirable, as the individual could come into contact with birds from the Swedish release project, or with feral birds and bring individuals or groups with an altered genetic make-up into the wild Fennoscandian population. Additionally, amongst many arguments for and against, it was considered extremely important not to destroy the natural migration route of wild Lesser White-fronted Geese that migrate through Russia, Hungary etc., to the wintering areas in Greece. This is important for the species, and also for the nature conservation in Hungary and Greece as these countries could risk losing the species within their national borders.¹¹

There is a lot going on here, I will try to draw out some of the central issues. Let me start with the ‘undesirable’ migration route. As I mentioned earlier, the Fennoscandian Lessers use two distinct routes for their autumn migration: a long ‘loop migration’ through Siberia and Kazakhstan, and a shorter route that flies directly to Greece through the Baltic and Central Europe. The choice of one or the other depends on the ‘success’ of individual birds during the breeding season. Lessers that have goslings at the end of the summer spend more time in Finnmark, molting with their goslings before taking the faster route directly to the wintering sites. Lessers that do *not* have goslings in a given year, however, depart earlier and fly out east, joining the great bachelor flocks on the Central Asian flyway. Here they mingle with other birds, in vast numbers—including Lessers from the two other surviving populations, the larger Western and Eastern Main.¹² Occasionally, male Lessers from one of the latter two will bond with females from the Fennoscandian flock and follow them back to the breeding grounds—effectively joining the population of their mate. This recruitment mechanism generally only works one way: female Lessers are philopatric, meaning they tend to remain in their natal area, while males disperse and form exogamous attachments.

Now, A16 was female. The crucial risk that she posed therefore, in migrating along another route than the main flock, was that she might come into contact with ‘undesirable’ males and draw them back to the breeding areas—introducing whatever issues they might be carrying, from altered genetic make-up to infectious diseases or alien behavioral patterns. One category of such undesirables are feral Lessers, including birds that have escaped from private collections, farms and zoos. The other category that the text mentions is birds from the ‘Swedish release project’. Since this project is probably the single most contentious, even painful topic in Lesser conservation worldwide, a short overview is useful.

The ‘Swedish release project’, known as *Projekt Fjällgås*,¹³ began in the late 1970s—with a Swedish ornithologist named Lambart von Essen, who decided that the rapidly declining population of Lessers in Sweden must be saved. Reasoning that one of the main extinction drivers for the species was poaching and human predation along the eastern migratory route, he decided that the best hope for the Lessers lay in establishing an *alternative migratory route*—one that would lead them in a safer direction, not into the poorly regulated territories to the east but preferably westward, into areas of northern Europe where poaching and human pressure were more closely managed. To achieve this re-routing, von Essen and his team developed a technique based on cross-species adoption—playing on the fact that geese learn socially, and that Lessers imprint more or less irreversibly on their first migration route. Based on the existing migratory routes of goose species present in Sweden, they identified the Barnacle Goose (*branta leucopsis*) as a suitable target species. One by one, the team then began to place the eggs of captive-bred Lessers¹⁴ into the nests of free-living Barnacles. Upon hatching, so the team hoped, the Lessers would imprint on their foster parents and be raised, in turn, as one of theirs.¹⁵

This cross-species adoption scheme worked well, Lambart’s team soon had a number of multi-species foster families on their hands. As soon as they were ready, each little family of hatchlings and foster parents were then captured and transported to a facility in Stockholm, and from there—when the goslings reached about six or seven weeks of age—to a release site in Swedish Lapland, where they would spend some time before starting their migration. The theory was that the Barnacle parents, who were older and had already completed at least one migration, would still be able to orient themselves and head for their traditional wintering sites in northern Germany and the Netherlands. The Lessers would follow, learning the migration route of their adoptive parents—a route that took them through safer territories that the

‘normal’, east-bound migration. When the time came for the return migration, the Barnacles would then return not to the release site, but to their own established breeding areas in the south of Sweden—while the Lessers, having imprinted on the site where they first learned to migrate, would return to Swedish Lapland. The two species would divide naturally, reducing the risk of hybridization.¹⁶

The plan worked, many of the geese returned and releases continued throughout the 1980 and 1990s—although there were problems. The cross-species imprinting did lead in some cases to the formation of cross-species pairs: there were documented cases of first-generation hybrids, offspring from Lesser-Barnacle pairings, and fertile first-generation hybrids *may* also have bred back into the line of either parent, producing second-generation hybrids; this is contested. More significantly, in the late 1990s, genetic analysis¹⁷ revealed that there were problems with the captive stock of Lessers that Lambart had used for the project. A number of specimens displayed introgression of so-called “alien genes”, from Greylag and Greater White-fronted Geese—indicating that cross-breeding between Lessers and other species had taken place at some point in the past, in captivity. As it turned out, almost two decades’ worth of released geese had been genetically impure from the start—even before issues of cross-species imprinting and hybridization arose. Lambart’s ‘free-flying’ geese immediately became a threat to the genetic purity of the wild Fennoscandian population.

From this point on, the story of Lambart’s geese becomes complex, and highly polarized. Despite efforts to curb them, including a moratorium on new releases that lasted from 1999 to 2010, the Swedish release population survives. In recent years supplementation has started up again, using a new stock of ‘genetically pure’ Lessers that descend from the Siberian Western Main—the same stock, in fact, from which A16 and her family were drawn. These new releases also use an alternative technique: wild-descended goslings are now placed directly into the breeding areas, without adult bonding or supervision. As a result, the geographical distribution of the release population has also become more diffuse, and erratic—as birds that survive the initial release now radiate out from the initial site along unpredictable, often more or less random routes. This, along with the geographical proximity of the Swedish release population to the Fennoscandian wild Lessers, meant that the unidentified male that followed A16 back to the breeding grounds *could* be one of Lambart’s birds—or a descendant. A16 had just concretized one of the key anxieties that threaded through the experiment: the possibility that even a small intervention like this might, in some way, lead to the wild flock being ‘compromised’ by the introduction of foreign elements. Given the field situation, and the resources available to the team, suspicion justified preemptive violence—and both birds were ‘dispatched’.

Let me recapitulate, then. Two primary concerns made the destruction of A16 necessary. Both circled around the issue of a fragility that needed to be defended. The first concern was genetic. Evolutionarily speaking, the Lessers are a young species: genetic analyses indicate they may have branched off from the Greater White-fronted Goose as recently as 150 000 or 200 000 years ago. Because of this, they can still breed relatively easily with other goose species. The resulting hybrids may also be fertile, capable (potentially) of breeding back into the populations of both parents. Genetic assays are costly, demanding and even in the best of cases, they are not necessarily capable of detecting genetic “contamination” with complete exactitude or certainty. After a generation or two, the descendants of a first-generation hybrid may be undetectable, indiscernible from genetically ‘pure’ birds—but their ‘impurity’ will remain. The fear of contamination becomes insidious, orienting a logic of preemptive suspicion rather than verification: violence flows not from certainty but from a balance of risks.

The second concern was behavioral—encompassing a range of behaviors, such as grazing preference, but specifically the choice of migration route. A Lesser learns its migration socially, and remains loyal to the route of its first migration. The route of the wild Fennoscandian Lessers is thus a social artifact, a collective cultural pattern that has been transmitted and inherited for millennia, passing from one generation to the next. Its age predates the invention of human writing by an order of magnitude—and it is fragile. All it would take for it to be lost, irreversibly, is for the chain of transmission to be broken: for one generation not to learn it but to imprint, say, on another route. This is also a problem of scarcity: in the heyday of the species, tens of thousands of birds might have sustained the route; a few stragglers lurching south would have made no difference. Today, however, the population is minuscule. Even one stray bird—a bird like A16—might pull them all along another route: a route that the hatchlings would then reproduce—faithfully, down to the tiniest detail—the year after, and the year after that, and so on, passing it on, in turn, to their own offspring. A new route would have been established. At best, the diminutive flock might be split, reducing the chances for survival even further. At worst, the old route might collapse entirely.

What *is* the Lesser White-fronted Goose, then? Is it a physical body defined by features such as the shape of a beak, plumage, skull proportions, the gold ring around an eye—traits whose presence and form may be assessed, so as to qualify or disqualify particular bodies as ‘valid’? Is it a genetic sequence, or the set of variations that comprise the acceptable permutations of that sequence? Is it the absence of genetic sequences coded as ‘foreign’, perhaps—say those associated with other goose species? Beyond this: is this being that is a Lesser even thinkable in separation from the behaviors that comprise its nonhuman culture, patterns that have been transmitted and refined over tens of thousands of years? Furthermore: could species identity perhaps depend—as it did, in the case of the supplementation goslings—on social acceptance by others of the species? Is it a combination of factors? Are the Lessers perhaps best understood as a living, multi-generational community that occupies and moves through specific environments, in a continuous manner, over a long period of time? If so then a method, any method that abstracts them from their environment—that proposes their salvation as a decontextualized object—can never be sufficient.

The various definitions coexist, overlapping and diverging, flowing into each other contextually. Their relative importance varies: sometimes in structured ways, sometimes in ways that boil down to the aesthetics or preference of individual researchers—but always in ways that powerfully determine the question of *what is to be done*. How are the Lessers to be saved? If being a Lesser is defined in genetic terms, for example, it might not matter *where* the correct genetic sequences are expressed: it could be in captivity, or in a new environment. To some, it might even be enough for the genetic sequences to survive as fragments, recombined in new bodies—the echo of Lesser morphology in a living hybrid might suffice for some, might offer the comfort that at least *something* of the species survived. ‘If it honks like a goose, flies like a goose, looks like a goose’ one German scientist asked me rhetorically, complaining about the purity concerns of the Norwegians, ‘then *what is the problem?*’ For others, such a proposition is wildly, infuriatingly inadequate.

Depending on what a Lesser *is*, in other words, it might be ‘saved’ by establishing new migration routes, or by setting up new populations in safer environments; or by engineering landscape-level interventions to reduce mortality, such as the extermination of local predators; or by creating (and enforcing) legal protections across the connected environments that form the migration route of the population. Each specification also offers ways in which the ‘object’ of salvation may be lost, compromised, or destroyed. Bodies may not ‘look right’;

genetic sequences may incorporate genes defined as ‘alien’; birds may learn to fly in the wrong directions, or feed on the wrong grass, or prefer the wrong habitats—or otherwise fail, like A16, to express the behaviors associated with the “authentic,” un-compromised wildness of a Lesser. Intractable conflicts such as the impasse over the Swedish release project boil down, effectively, to conflicting or incompatible definitions of what a Lesser *is*—such that it may (or may not) be saved in certain ways.

Of course, simple genetic or morphological definitions are reductive. Excluding traits such as learned behavior, or preferences for specific habitats, environments and locations, they enable the abstraction of the Lessers into forms that may be transported, transposed, recombined, bred in captivity, released into new environments—perhaps even digitized, restored or reassembled from genetic code. Simplifying their ‘object’, such definitions render their loss fluid, manageable, less absolute, potentially even reversible. There is a kind of violence in this: a reduction of being that renders fungible, conflating the bodies of the dead with the bodies that replace them. At the same time, however, the richest and most complex definitions of the Lessers—the ones that can encompass simultaneously their genetics, their morphology, their learned behaviors, their embeddedness in habitats, the social acceptance of other Lessers—are *also* the ones that enable the most intense and obvious physical violence: a killing violence that is absolute, exterminatory in its demands.

4. Violence, Purity and the Wild

What counts as ‘survival’, if the act of rescue transforms the thing that is rescued—if what survives is no longer what you set out to save? By her engineered purity, A16 embodied the constant and fundamental anxiety of her handlers about methods such as captive-bred supplementation: the fear that through such methods the Lessers might, in some way, be *compromised*—that some essential quality of theirs might be destroyed precisely *in the act of trying to save them*. ‘Alien’ genes might enter the gene pool; foreign behavioral patterns might spread through the flock; the migration route itself might be compromised. One way or the other—through some subtle alteration, visible only to the few—the Fennoscandian Lessers *as they were* might be lost forever. If this happened, or so people kept telling me, it would be ‘all over’: conservation efforts would be discontinued, funding redirected, the population abandoned. From her birth in the containment facility to her abrupt end, out on the marshes, the life and death of A16 were thus shaped by this anxiety, and by the particular concept of the wild that gave rise to it: an image of purity so immaculate, so intensely policed that even the smallest deviation could only mean death.

This was the wild of the wilderness: untouched and remote, ‘uncontaminated’ by human presence; a romantic construct, generated through wishful thinking—simplified, and all the more powerful for it. This was the wild as *fragile*, to an almost extraordinary degree: to the point where wildness could be lost simply by a bird hearing the wrong call—and once lost, be lost forever. Protective violence flowed from this concept, like a red thread, surfacing throughout my material in complex and sometimes unexpected ways: in bare-handed killings and orchestrated campaigns of extermination, sure—but also in the sudden change of tone, the grimace of disgust, the nervous requests for confidentiality, the off-the-record conversations; an informant spitting on the ground as he discussed the work of another scientist. Right from the beginning people told me, in hushed tones, about the legendary brawls, the drunken after-hours fistfights in the bars at scientific conferences; enmities that spanned decades, playing out across the volumes of specialist journals. Lambart von Essen himself was said to have died of a broken heart, at the age of 80—shortly after a fractious and particularly intense meeting of the

parties in 2000, in which a furious Norwegian ornithologist had leaned across the table and shouted at Lambart that he would kill, with his own bare hands, every single one of the ‘filthy bastard geese’ that crossed into Norway from the Swedish release project.

This wild that stood to be lost in A16 had the purity of an absolute exteriority: of the geese to the human, to the sphere of human presence, influence and activity—but symmetrically, also, an exteriority of the human to the nonhuman, such that the merest trace of human influence could destroy the ‘natural’ wildness of the birds. This exteriority was maintained through the exercise of killing violence, but also through techniques of intervention, containment and engineering that continuously erased their own operation—preserving, as far as possible, the appearance of an intact, untouched independence in their object. In an inadmissible way, the wildness of the Lessers was *curated*: a well-known and predictable quality, consistent over time, familiar. It was also, in a basic sense, apocalyptic. Locked in a losing war of attrition against an ever-expanding human footprint, it could only generate an image of the world under siege: a ‘world of wounds’¹⁸ in continuous crisis, forever subject to the escalation of a catastrophe that was barely (if ever) held at bay. Essentialized as pristine, the wild could only register its own diminishment—the irrecoverable taint of meddling.

In my first conversation with the Norwegian Lessers team, sitting at an outdoor table outside a local museum near the area where they were conducting the spring monitoring, I had asked two of them a simple question—or at least, what I thought was a simple question. This was in 2010, during the spring monitoring. ‘Where do you think this is going? Where will things be in ten years?’ The men looked at each other, startled—then they both laughed. It’s all going to hell one said, somewhere between a smirk and a sigh. But in style! the other exclaimed—suddenly banging his head, as if at a rock concert. At the time, their response puzzled me. These were men who had spent most of their adult life trying to save this particular species. More than once I had stumbled across them in ornithological reports—thirty years younger, fresh-faced and grinning, holding up captured Lessers for the camera. In my transcripts, birders and researchers from across Europe—Swedish, German, Finnish, Belgian, Dutch—were all complaining that their hardline stance, the commitment of these men to an absolute purity that refused even the slightest compromise, was defeating their own efforts to save the Lessers, dooming the species to extinction. And yet here these men were—still refusing all compromise but telling me, in so many words, that they thought their work would come to nothing.

I have wondered for some time about that moment: whether something in it might offer a key to the deadlocks and impasses—the tense, almost warlike affects—that saturate the conservation assemblage of the Lessers. Was this masculine bravado? Gallows humor? Flippancy, deflecting some inarticulate sorrow? To me at least, the response echoed with a kind of Thermopylean heroism—a masculine heroic complex invested in the tragic grandeur of impossible battles, of doomed stands against impossible odds, of the captain going down with their ship. Better, perhaps, to see the Lessers to their inevitable destruction than to see them changed, altered, unfamiliar, no longer ‘themselves’. Better the principled purity of extinction than the compromise, which inevitably entailed too the death of the pure object *as pure*. In hindsight I do not think this line of interpretation is necessarily untrue, or inaccurate—but it is incomplete. The moment also lends itself to other, more generous readings: including one that scans for hope, and for the shapes that hope can take where there seems to be nothing left to hope for.

At the time, conceptualizing the situation teleologically—in terms of action oriented towards a future fix, or resolution—I could only interpret their response as the expression of

a commitment that recognized itself as futile: a commitment which, when sustained beyond the moment of that recognition, became a sort of death-wish; a heroism of the futile stand. Perhaps, however, what the moment reveals is something else entirely—something obscured by my own expectation of viable, durational goals, of conclusive states, of decisive objectives. Even back then, in 2010, our conversation was already set against the horizon of a cataclysmic planetary situation: a generalized ‘going to hell’ of collapsing ecosystems, mass extinctions, runaway climate processes and a destabilizing biosphere, a background to which—as field naturalists, wildlife ecologists—my informants were far more vividly attuned than me. Against such a backdrop what were the odds, really, for a species like the Lessers? A small and nondescript bird, obstinately resistant to change—a bird furthermore that, as several informants admitted to me off the record, tastes *delicious* in a stew?

Here is the question I am circling: if a viable future were impossible to imagine, might not hope then reinvest itself instead in the effort to *make endure*¹⁹—to make the Lessers live, if only as long as possible; extending survival one more day at a time, in the piecemeal deferral of the catastrophe? Every effort of the Norwegian team is legible in this way: not as a ‘fix’, but as an attempt to extend the survival of the Lessers—of the *real* Lessers, at least as they saw it—for as long as possible; survival not as end-goal but as prolongation, a deferral of the inevitable. Perhaps, then, the short and artificial life of A16 is best read as a cautionary tale: a story of what can happen when the effort to “make endure” allies itself to the image of an absolute purity—and avails itself of the violence that this purity authorizes. The pristine wild—the one A16 failed to attain, ultimately—is an aesthetic device, but also a political one: a purity that commands death. What might a concept of the wild look like that set itself *against* such purity²⁰—that disavowed the lethal biopolitics of the immaculate, of the “untouched” life? Perhaps, on a disturbed planet, the task that behoves us is not to police the dwindling purity of the Garden—but rather to find (or invent) such vocabularies of existence as may *do justice*, finally, to A16 and her ilk: to the life that emerges, newborn and fugitive, from the holocaust of the Anthropocene.

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Endnotes

1. Estonian Science Foundation (ESF) grant MJD3, "Sacred Others in a Changing Landscape—Environmental Change and Animal Practice in the Norwegian Arctic" (2009-2012).
2. <http://www.miljodirektoratet.no/no/Nyheter/Nyheter/2017/Oktober-2017/Alvorlig-utvikling-for-bestanden-av-dverggasa/>
3. <http://www.birdlife.no/organisasjonen/nyheter/?id=1951>
4. Hugo Reinert, 'Face of a Dead Bird—Notes on Grief, Spectrality and Wildlife Photography', *Rhizomes: Cultural Studies in Emerging Knowledge*, no. 23, 2012; 'The Care of Migrants—Telemetry and the Fragile Wild', *Environmental Humanities*, vol. 3, 2013, pp. 1-24.
5. Hugo Reinert, 'Sacrifice', *Environmental Humanities*, vol. 7, 2015, pp. 255-258; 'Notes from a Projected Sacrifice Zone', *ACME: An International Journal for Critical Geographies*, vol.17, no. 2, 2018, pp. 597-616.
6. e.g. Rob Nixon, *Slow Violence and the Environmentalism of the Poor*, Harvard University Press, Cambridge, 2011.
7. Three males and one female, initially sexed as male.
8. Rebecca Lee, Peter Cranswick, Geoff Hilton and Nigel Jarrett, *Feasibility study for a re-introduction/ supplementation programme for the Lesser White-fronted Goose *Anser erythropus* in Norway*, WWT Report to the Directorate for Nature Management, Norway, Wildfowl and Wetlands Trust, Slimbridge, 2010. See also

John Marchant and Andrew Musgrove, *Review of European flyways of the Lesser White-fronted Goose Anser erythropus*, Research Report 595, British Trust for Ornithology, Norfolk, 2011.

9. Initial report of the sighting here: <http://www.birdlife.no/prosjekter/nyheter/?id=881>
10. The report is very critical of Swedish conservation efforts, reflecting a long-standing hostility of the authors to the Swedish release project. For a retort from Sweden, see <http://jagareforbundet.se/en/projektfjallgas/responce-to-norwegian-report/>.
11. Thomas Aarvak, Ingar Jostein Øien and Paul Shimmings, *A critical review of Lesser White-fronted Goose release projects*, BirdLife Norway report 2016-6, NOF, Trondheim, 2016, page 51.
12. AEWA, *International Single Species Action Plan for the Conservation of the Lesser White-fronted Goose*, AEWA Technical Series no. 36, UNEP/AEWA Secretariat, Bonn, 2008.
13. Translates as "Project Mountain Goose", the Swedish name for the Lessers. Project overview here: <http://jagareforbundet.se/en/projektfjallgas/>. For a short overview see also Åke Andersson, 'The reintroduction of the Lesser White-fronted Goose in Swedish Lapland', in Tomas Aarvak and Sami Timonen (eds), *Fennoscandian Lesser White-fronted Goose conservation project: Report 2001-2003*, WWF Finland Report No. 20 and Norwegian Ornithological Society, NOF Rapportserie Report No. 1-2004, 2004, pp. 51-52.
14. From Swedish zoos, and later also from Denmark and the UK. See Åke Andersson, Lennard Gladh and Torsten Larsson, 'Hur går det for fjällgåsen i Sverige?' *Vår Fågelvärld* 3 (2004), pp. 16-21.
15. An overview of the release technique here, <http://jagareforbundet.se/en/projektfjallgas/this-is-how-the-release-is-done/>.
16. It is worth noting that *Projekt Fjällgås* is far from the most inventive or controversial attempt to address the problem of the Lessers' migratory route. In 1999, just as tensions over the genetics of Swedish release project were coming to a head, a French meteorologist named Christian Moullec set forth to solve the issue—using an alternative method that would provide a new route, while also solving the problem of cross-species hybridization. Like Lambert von Essen, Moullec would also raise a new population of Lessers, one that would follow an artificial, "safe" migration route from Swedish Lapland to northern Germany and the Netherlands. Rather than having them learn this route from geese of other species, however, Moullec would guide them *himself*—using a microlight aircraft he had carefully trained them to follow. The idea worked, and a number of the geese returned the next year, but for a number of reasons it was never followed up. His idea was subsequently picked up by German researchers and an NGO—named *Aktion Zwergganz*—was formed to promote the idea. See Johan Mooij, Axel Pausch and Wolfgang Scholze, 'Reintroduction of the Lesser White-fronted Goose *Anser erythropus* in Fennoscandia with the help of microlight aircraft', in G C Boere, C A Galbraith and D A Stroud (eds), *Waterbirds around the world*, The Stationery Office, Edinburgh, 2006, pp. 633-634.
17. Minna Ruokkonen, 'Phylogeography and Conservation Genetics of the Lesser White-fronted Goose (*Anser erythropus*)', PhD dissertation, Oulu University, Oulu, 2001.
18. Aldo Leopold, *A Sand County Almanac*, Oxford University Press, Oxford, 1949.
19. Elizabeth Povinelli, *Geontologies*. Durham, Duke University Press, 2016.
20. Alexis Shotwell, *Against Purity*. Minneapolis, University of Minneapolis Press, 2016.