

Morten Tønnessen

Is a wolf wild **as** long **as** it does not *know* that it is being thoroughly managed?<sup>1</sup>

The current situation of the Scandinavian wolf involves a strange paradox: The future of the wolf, a master of seclusion, apparently depends on its being managed by conservationists to an extent that makes the very notion of “wild wolves” appear dubious. The wolves, of course, are not always aware of what is being done for their sake, and when they do encounter wildlife managers the encounter is as a rule an unpleasant one (the encounter with humans is not *supposed* to be a pleasant experience for a wild animal such as the wolf). Whereas a wolf’s life might actually be saved by conservationist intervention through the use of helicopters and tranquilizers, with the aim of medical/surgical treatment, for instance, what the wounded or sick animal experiences is rather that it is hunted, captured, and forcefully incapacitated.

Even more telling than these modern fairytales of wildness is the fact that with widespread use of modern technologies such as radiocollars, the wolf is no longer the one in the human-wolf relationship that has the best overview of the whereabouts of the other. That used to be the normal position of the wolf — consider Næss’ dated statement that wolves “are rarely seen and very careful to stay out of trouble. There is therefore a reasonable chance that the life communities comprising a (fairly small) number of wolves will persist” (239). In the case of non-radiocollared wolves, however, the wolf may still have the best overview. One might be tempted to state that the wolves of Scandinavia are actually no longer wild, but that this, alas, is kept secret from the wolf. For all the wolf knows, it is still a wild animal — and it still *behaves* like one. But are we justified in claiming that a (more or less) free-ranging wolf is truly wild, simply because it does not *know* that it is being thoroughly managed?

**Background.** The animal population to which my research is devoted is the recovering gray wolf (*Canis lupus*) population on the Scandinavian Peninsula, which is situated close to the southern part of the Norwegian-Swedish border, mostly on the Swedish side. The rationale for the choice of these particular study animals can be summarized in three points. First, wolves are among the most adaptive mammals on Earth, as evidenced by today’s enormous variety of dog (*Canis familiaris*) breeds. Second, wolf management is typically controversial, and not less so in the otherwise peaceful Scandinavian context, where it has given rise to a symbolic strife between rural

traditionalists (sheep farmers, hunters) on one side, and conservationists popularly associated with the government and urban elites on the other. Third, the current Scandinavian wolf population has been monitored and sampled practically speaking since its foundation 20-30 years back. As a result, there is a rich scientific literature on the topic which is close to unique in its scope. Researchers from six institutions partake in the Scandinavian wolf project (SKANDULV), and more than fifty people are involved in field work (Pedersen et al. 6).<sup>2</sup> Policy differences reached the headlines early in 2001, when permission was given in Norway to hunt nine wolves, despite protests from Swedish officials (cf. Cinque 7-8). The Swedish parliament originally outlined a policy according to which large carnivores would be allowed to spread within their natural habitats, but after the first legal hunt for more than a generation this January – in which 4,500 eager hunters took part – future population targets are now up for debate. Norwegian authorities on their part have operated with a zone inside which wolves will generally be tolerated (last revised in 2004). At present there are around four times as many wolves in Scandinavia as there are field workers associated with SKANDULV.

**The wild, the shy, and wilderness.** The topic of wildness is a matter of ongoing debate in the wildlife management community. In the scope of this essay I will relate it solely to questions of shyness and actual human interference (especially on the management side). In terms of being shy and fearful, the wolves on the Scandinavian Peninsula clearly qualify for the term “wild” – they have retained their fear of people. The degree of human interference, however – including the facts that these wolves are familiar with several human artifacts/constructions, and that they are dependent on wildlife management – seems to suggest that shyness is not a sufficient criterion for wildness.

Two studies have been conducted to investigate Scandinavian radiocollared wolves’ tolerance of the presence of humans, by Wam and Karlsson et al. Wam found that 123 out of 125 trials with five wolves resulted in the wolf running straight away, and concluded that these wolves were shy animals, showing no sign of habituation (Karlsson et al. reached a similar conclusion). “Instinctively a wolf in Scandinavia today knows it should avoid approaching persons,” notes Wam (28), alluding to the evolutionary law of the *survival of the shyest*. The bed site preference of the wolves indicates their ability to learn. Prior to being disturbed, the wolves used overlooking sites high in the terrain, while after being disturbed they typically sought secluded sites. Wam estimates the chance of a hiker being confronted by a wolf in Scandinavia as practically nil. This assertion is reinforced by an independent finding that only a tiny

minority of dog owners whose dogs were attacked by wolves saw any sign of the wolves prior to the attacks (Backeryd 11).

Part of the controversy in the Norwegian public debate on wolves concerns whether or not the current wolves are to be regarded as native animals. Given their Russian origin (all current wolves originate from immigrants from the East), one recurring argument goes, they can hardly be considered as endangered — the Scandinavian wolf is dead and gone. In the Scandinavian context there is no doubt that today's wolves are endangered, by illegal hunting and a still pressing risk of inbreeding. Unlike in older times, the current wolf population has to navigate within a so-called multi-use environment, with plenty of human footprints. In Norway, the extent of wilderness areas (defined as areas more than 5km from a major technical infrastructure) is estimated to have declined from 48% in 1900 via 34% in 1940 to 12% in 2003. This process has for the most part not been directly correlated with historical wolf extinction. In the South of Norway, wolf extinction (in functional terms) preceded most wilderness loss, rather than being caused by it. What killed the original Scandinavian wolf was not the loss of wilderness areas in itself, but rather the human claim to areas that went along with it (and that in part preceded wilderness loss).

**Human interference in wolf ecology — mortality.** The local specimen of the human species no doubt influences Scandinavian wolf ecology at many levels, ranging from constitution of the prey base to habitat preferences and movement patterns. In this section, however, I will point to a connection which comes into particularly sharp focus.

Wolf mortality is beyond doubt dominated by human causation. The first wolf in the modern population to die of old age was a 14-year old alpha female found dead the winter of 2002-2003. Her death is reported by Olsen, who observed that mortality was high even before the fairly recent leap in mortality. Her survey encompassed 84 retrieved dead wolves, 18 of which were radiocollared. Only roughly one out of five of the wolves died of natural causes. Vehicle trauma (wolves hit by cars or trains) was the single most frequent cause of death, causing more than one out of four deaths. From another point of view *shooting* appears as the cause of more than half of all deaths. These include wolves hunted legally and illegally, and further wolves shot to protect livestock. According to Olsen's math 51% of the 81 wolves with known causes of death "were probably shot to death," but this does not include four wolves categorized under disease/anomalies, which were shot because of their bad condition, or a juvenile female that was shot after being observed with a serious injury on a hind leg. As a matter of

fact, 59% were shot to death. Counting these, the proportion *effectively* dead from human-related causes is not 82%, as Olsen reports, but 87%. Management-related deaths alone account for more than two out of five deaths included in the study.

A more recent survey of wolf mortality (Liberg et al.) estimates that natural causes of death account for around a fifth of overall mortality. Here, illegal hunting is estimated to account for half of the chance a wolf has of dying in each single year. If that assessment is correct, an estimated 136 wolves (plus/minus 56) were killed illegally 1999-2006. Further evidence of illegal hunting is reflected in the fact that three of the wolves killed in traffic in Olsen's survey had old gun wounds. Liberg et al. report 11 similar cases among retrieved dead wolves.

**Human artifacts in the life-world of wolves – captures.** In a multi-use landscape, even shy wolves inevitably come in contact with human artifacts and constructions – though these objects might have a very different significance for the wolves (if any), and might not be associated with humans. In general Scandinavian wolves tend to avoid areas with human activity. Roads and railway tracks are a deterrent or an attraction depending on the season (Olsen 21). In winter they provide useful paths saving wolves from the efforts of hiking in heavy snow (hence vehicle trauma).

In addition to cars, trains, snowmobiles, bullets, etc., wolves might encounter even more products of civilization as a direct result of management policies. In Scandinavia these include helicopters, various electronic installations making use of light or sound (e.g., radios with timers) in order to scare wolves, labels and instruments such as plastic ear-tags and radiocollars weighing up to a kilo (Arnemo and Fahlman 7), as well as medication, including sedatives and penicillin, which are routinely used during surgery in the field. Before a legal hunt is licensed, attempts are made to protect livestock with various physical obstacles, or to scare the preying wolf with shots, shouts, throwing of stones, etc.

Nine of the ten wolves in Olsen's study that were shot to death to protect livestock were shot by licensed state game wardens from helicopters, all in Norway. Helicopters are also used when wolves are darted and chemically immobilized as part of captures where tissue samples, hair samples, feces, EDTA blood, and serum are collected. During captures, wolves are often partially awake. "Animals that have been captured before (especially wolves)," note Arnemo and Fahlman, "will usually run for cover when they hear the helicopter" (6). During the last two decades, more than 2,000 captures of free-ranging brown bears, wolves, wolverines, and lynx have been carried out in

Scandinavia. SKANDULV started capturing wolves only in 1998, but had after five years captured 52 wolves, 16 of which had been immobilized two or three times (Olsen 17).

**On viability, dependency and long-term management goals.** Surely members of an animal species can die by the hand of human beings and yet be wild animals. The particular mortality of Scandinavian wolves nevertheless demonstrates an overwhelming human impact on local wolf ecology, not least due to the role of management and of vehicle trauma. The most telling facts represent incidents of wolf encounters with human artifacts and constructions. Returning to my initial question, we might well look to the future, to the long-term goals of wildlife management. My view is that wildness has to go beyond appearances. The long-term goal of wildlife conservation should be to restore the *independent viability* of wildlife. This contrasts with the *dependent* viability of wild species associated with continued management (for an example of dependent viability, think about dogs — cf. the fact that feral dogs “are not reproductively self-sustaining, suffer from high rates of juvenile mortality, and depend indirectly upon humans for food, co-optable individuals, and space” [Boitani and Ciucci 49]). The long-term goal of wildlife management, in other words, should be to make itself redundant. That being said, there is no doubt that in today’s situation emergency measures are required, and that an “end of management” can only justifiably come into effect after fundamental societal changes have taken place (and even then non-intervening observations should take place, to monitor population levels etc.).

It appears to be intuitively true that the more we favor the wolves through conservation measures, the better. The *long-term* goal of management, however, should be that human societies as a whole neither favor nor work against the wolf. For this somewhat utopian goal to be realized, a cultural change is required, after which people will no longer assume a human monopoly on land use and on prey species. People will further have to perceive co-habitation with wolves and other wildlife species as natural, desirable, or tolerable. Until then, the conservation of the Scandinavian wolf will remain a struggle that depends not so much on what is biologically possible as on what is culturally possible.

**Closing note: On Arne Næss’ philosophy of wolf policies.** I have great respect for the work of Arne Næss.<sup>3</sup> But in his suggestions for wolf policies, it becomes evident that he had trouble, at least in this case, with translating fundamental norms into workable

operational principles. Næss' 1974 article "Self-realization in mixed communities of humans, bears, sheep, and wolves" says little about wolves, and his emphasis is on pointing out that their cultural setting is very different from that of bears: "There is a great *respect* for bears, whereas wolves are more dreaded than respected" (239). Part of the trouble is that Næss in the very same article argues that value attribution can be based on the common considerations of laypeople. That may work for the well-respected bears, but not so well for the traditionally demonized wolf. What status is the wolf to have, if the sole criteria for attributing moral status are the culturally problematic judgments of the locals in any given community?

Næss' positive contribution in his 1974 article is his principled talk about "mixed communities," and the general, egalitarian norms/maxims of self-realization, self-determination, etc. In Næss and Mysterud we are told that a mixed community "must be defined in such a way that humans and limited groups of animals that play a more or less well-known role in human affairs are included as members" (341). A mixed community implies awareness of the other, but not necessarily physical nearness. In that article, wolves' predation on sheep is dealt with in some detail. The only norms that are treated extensively concern individual suffering. The authors attempt to do away with numerical considerations by introducing norms such as this one: "Severe suffering endured by a living being  $x$  is of no less negative value than severe suffering endured by a living being  $y$ , whatever the species or population of  $x$  and  $y$ !" (345). Additional norms are introduced to stress that population numbers do not matter. But how do we compare the torment of hundreds of sheep in the moments preceding wolf predation, and the distress of thousands of survivors — on top of the partly irrational fear of tens and hundreds of thousands of people — with the joys and sorrows of a few wolves?

In the case of wolf predation on sheep, Næss and Mysterud suggest a compensation scheme (such a scheme is in effect today). But if the coexistence of wolves and sheep farmers causes insoluble problems, we are told "territorial changes must be considered: the removal of wolf or sheep or farmers" (352). Will the mixed community turn out to be but a Utopia? Ecological segregation may work in Norway, a sparsely populated country, but in the *inhabited* parts of the world such strategies are hardly viable: Mixed communities are a must. Ironically, by choosing wolves and sheep as their study animals (as have I in my ongoing research), Næss and Mysterud in effect reproduce erroneous popular perceptions giving exaggerated weight to sheep in the perception of wolf ecology. (In fact, Scandinavian wolves eat 1. elk, 2. roe deer, and 3. beaver.) Why base conservation policies on such misleading terms?

Arne Næss did not provide a solution to the (perceived) problem of wolf conservation in Scandinavia. But he was clear in his value statements — and he and Mysterud were right in observing that “unfortunately, experts and researchers have a tendency to avoid norms and values at a fundamental level” (346). To make such value statements today, I repeat, “is a social obligation” (347).

### Notes

1. This work has been carried out partaking in the research projects The Cultural Heritage of Environmental Spaces: A Comparative Analysis between Estonia and Norway (EEA–ETF Grant EMP 54), Dynamical Zoösemiotics and Animal Representations (ETF/ESF 7790), and Biosemiotic Models of Semiosis (ETF/ESF 8403). The research was further supported by the European Union through the European Regional Development Fund (Centre of Excellence CECT).
2. It should be noted that I myself am not a part of SKANDULV.
3. Cf. Tønnessen 2003, an article devoted to interpretation of the Deep Ecology platform.

### Works Cited

Arnemo, Jon M., and Åsa Fahlman, eds. *Biomedical Protocols for Free-ranging Brown Bears, Gray Wolves, Wolverines and Lynx*. Tromsø: Norwegian School of Veterinary Science, 2007.

Backeryd, Jessica. “Wolf attacks on dogs in Scandinavia 1995–2005: Will wolves in Scandinavia go extinct if dog owners are allowed to kill a wolf attacking a dog?” Student paper (SLU no. 175). Uppsala: Sveriges Lantbruksuniversitet, 2007.

Boitani, L. and P. Ciucci. “Comparative social ecology of feral dogs and wolves.” *Ethology Ecology & Evolution* 7:1 (1995): 49-72.

Cinque, Serena. *I vargens spår: Myndigheters handlingsutrymme i förvaltningen av varg* [In the tracks of the wolf: The use of discretion by public officials in the management of Swedish wolf policy]. Doctoral thesis. Göteborg: Göteborgs Universitet, 2008.

Karlsson, J., M. Eriksson and O. Liberg. “At what distance do wolves move away from an approaching human?” *Canadian Journal of Zoology* 85:11 (2007): 1193-1197.

Liberg, O., H. Sand, P. Wabakken, and H. C. Pedersen. *Dödlighet och illegal jakt i den skandinaviska vargstammen* [Mortality and illegal hunting in the Scandinavian wolf population]. Viltskadecenter report no. 1-2008.

Linnell, John D. C., Jon E. Swenson, and Reidar Andersen. "Predators and people: conservation of large carnivores is possible at high human densities if management policy is favourable." *Animal Conservation* 4:4 (2001): 345–349.

Naess, Arne. "Self-realization in mixed communities of humans, bears, sheep, and wolves." *Inquiry* 22:1-4 (Summer, 1974): 231-241.

Næss, Arne, and Ivar Mysterud. "Philosophy of wolf policies (I): General principles and preliminary exploration of selected norms." *Philosophical dialogues: Arne Næss and the progress of ecophilosophy*. Ed. Nina Witoszek and Andrew Brennan. Lanham: Rowman & Littlefield, 1999. 339-359. (Reprinted with minor revisions from article in *Conservation Biology* 1 (1987): 23-34.)

Olsen, Marianne Linder. *Causes of mortality of free-ranging Scandinavian grey wolves 1977-2003*. Project paper. Tromsø: The Norwegian School of Veterinary Science, 2003.

Pedersen, H. C., S. M. Brainerd, O. Liberg, H. Sand, and P. Wabakken. *Ulv — bestandsdynamikk, levedyktighet og effekter av uttak* [Wolves – population dynamics, viability and effects of alpha-individual loss]. Report commissioned by Norwegian authorities. Trondheim: NINA [Norwegian Institute for Nature Research], 2003.

Tønnessen, Morten. "Umwelt ethics." *Sign Systems Studies* 31:1 (2003): 281-299.

Wam, Hilde. *Wolf behaviour towards people: The outcome of 125 monitored encounters*. Masters thesis. Ås: Norwegian Agriculture University, 2003.

Woodroffe, R. "Predators and people: using human densities to interpret declines of large carnivores." *Animal Conservation* 3:2 (2000): 165–173.