Medieval reindeer drives at Sumtangen, Hardangervidda : two interpretations
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av främmande idéer och tankegångar. Vi måste sluta beskriva de gamla sakerna som om de vore en essentiell folkgrupps egendom.

Den kritik som fört fram mot sverigedemokrater sammanblandar symptom och sjukdom. Kritiken borde riktas mot den rådande kulturpolitiken som har skapat idén om »vårt kulturarv» och därmed lagt grunden för ett kulturellt särartstänkande som förändrat bevarande- arbetets utgångspunkter.


Referenser

Medieval Reindeer Drives at Sumtangen, Hardangervidda: Two Interpretations

At a handful of the lakes on the rugged northernmost parts of the mountain plateau Hardangervidda in Norway are found remnants of large, solidly built stone huts surrounded by layers of reindeer bones and antlers. The best known of these are two at Sumtangen, a spit of land on Lake Finnsberg. The hut floors measure 4 by 6 metres. These were the first Hardangervidda huts that came to the knowledge of antiquarians, in 1838. Ever since, more or less fanciful hypotheses have been presented as to when and by whom the huts had been used, and how the hunting had been carried out. Only with Johannes Bøe’s excavations in 1939-40 was it established that the huts most probably date back to the Early Middle Ages, 1050–1350 (Bøe 1942, p. 32). Roughly thirty years later this was confirmed by radiocarbon dates on bones from the middens (Blehr 1973, p. 106). As to how the hunt was carried out, Hjalmar Negaard’s assumption (1911, pp. 63–64) that it was done in the same manner as known from the circumpolar area has been confirmed. That is, the reindeer were scared with the aid of strategically placed cairns and poles and thereby driven into lakes, where they were outmanoeuvred and killed by hunters in boats (Blehr 1973; 1982; 1987; 1990;
However, when it comes to who organised the hunt, fanciful hypotheses still live on. I am responsible for one of them, namely that the hunt was organised and carried out by action groups based on dyadic kinship relations between its members (1973, p. 111). Svein Indrelid and Ann-Karin Hufthammer now suggest that the hunt “may have been organised by merchants in the towns, possibly under the control by the Crown or the clergy” (2010, p. 10).

Though I have considered that the yield from the communal reindeer drives must have been considerable (1973, p. 106), I never estimated how many years of hunting the bones in middens represented. Based on my radiocarbon dates I concluded that the hunt had been carried out regularly through the Early Middle Ages only to end abruptly with the Black Death 1349–50 (1971, p. 99; 1973, p. 111). The attraction of Sumtangen, as well as the other localities with stone huts and middens consisting of reindeer bones and antlers, was not based on catching very large numbers of reindeer quickly, as I saw it, but rather on dependability, allowing the hunters to be certain of getting the animals they needed for their own consumption by means of communal drives.

Indrelid & Hufthammer take quite an opposite view. They see Sumtangen as a place where, by means of communal drives (what they label “mass-hunts”), people managed to get entire herds into the water and kill them (2010, p. 1). This hypothesis is based on an old legend from Sumtangen and on the mean radiocarbon dates of fifteen bone samples from the middens outside the huts, as well as on an estimate of how many reindeer all the bones in the same middens represent. Calculating the mean BP date of their fifteen bones and then calibrating it, they conclude that the hunting peaked in 1240–1290 (2010, p. 5). The estimated number of reindeer in the middens are then calculated by the MNI (minimum number of individuals necessary to account for the specimens observed) to be 5500 animals and by the MLNI (the most likely number of individuals) 7800 animals. Indrelid & Hufthammer only take into account the years falling within the mid-range given by the mean date. Thereby they estimate the annual average yield based on 7800 animals to be 156, if the reindeer had been killed over a 50-year period, or 312 if they had been killed over a 25-year period. Whereas, if the estimate is based on 5500 animals, the figures are 110 and 220 animals respectively (2010, p. 8).

**How Long Did the Communal Drives at Sumtangen Last?**

Indrelid’s and Hufthammer’s four estimations have one thing in common. They are based on the premise that the drives took place only during the peak period indicated by the mean dates of the fifteen bone samples. But a calibrated radiocarbon date is a probability distribution with tops and bottoms, and it is not sound methodology to calculate a mean BP value before calibration since different years in each individual date’s distribution have unequal levels of likelihood.

However, by building a Bayesian model in OxCal, and modelling the sample dates as one phase, we find that the activity took place over a duration of between 62 and 182 years (95% probability) – most likely between 88 and 139 years (68% probability), or roughly speaking a century (figs 1–2). Thus, the average annual yield would be 78 reindeer if based on 7800 animals, or 55 if based on 5500 animals.

**Hunting With Communal Reindeer Drives**

Negaard (1911, pp. 60–61, 63) pointed out that in areas with many lakes, the step to inventing reindeer drives must have short for hunters with poor weapon technology. What he stated here implicitly was that as reindeer are hampered in their movements by water, they are an easier prey swimming than when hunted on land. He thus explained why drives ending in lakes were the preferred form of hunting. By making relevant the relationship between the weapon technology of the hunters and the behaviour of the species hunted, he was in the archaeological context a pioneer. We learn from the writings of Arctic ethnographers that an animal cannot be hit with tolerable accuracy with an arrow beyond a range of 20–25 meters (Stefansson 1914, p. 242; Rasmussen 1931, p. 170; in the following I lump together the two main tundra subspecies that concern us here: Rangifer tarandus tarandus, reindeer; and R. tarandus groenlandicus, caribou, and use the terms interchangeably). To get this close to a wild
Figs 1–2. Bayesian model of Indrelid & Hufthammer’s radiocarbon dates on reindeer bones from Suntangen’s middens. The sampled reindeer died over a duration of most likely 88–139 years (68% probability). Analysis by Christopher Bronk Ramsey, Oxford Radiocarbon Accelerator Unit.
reindeer before it notices you and takes flight is extremely difficult. Thus hunting individual caribou with bow and arrows, as the Caribou Inuit Igjugarjuk put it, demanded “great exertion, great perseverance, and never yielded anything much” (Rasmussen 1930, p. 41).

Before the introduction of the gun it was therefore only possible to depend on wild reindeer as a resource when you had a technology that enabled you to control their movements. Driving them into water has the advantage that reindeer take to water when threatened (cf. Crisler 1956). This evolutionary adaptation to wolves, which will not pursue reindeer in water, clearly became a disadvantage when the predators were humans who in fact wanted to get the deer there. Note that the main reason why hunters resorted to communal reindeer drives was not that the number of animals taken this way was necessarily impressive. Rather, drives were preferred as a hunting method because they were so overwhelmingly successful compared to individual hunting with bow and arrows. Thus drives were often resorted to even when it came down to a few animals, or even a single one (Jenness 1922, pp. 149–151; Taylor 1969, pp. 150–156).

The drives are marked by small stone cairns that allow us to map them. These cairns supported what I will label “frightening poles”. Actually, they are usually not proper cairns, consisting as they often do only of one or a few stones on top of a larger one. When they are recognized as “cairns”, it is it often due solely to the fact that they are placed so distinctively in line with each other. One should therefore not place too much weight on their specific forms.

Reindeer do not differentiate between what is dangerous and what is not when the object is downwind from them and motionless. However, any movement is bound to make them suspicious of danger. This explains the paramount importance of attaching something that flutters in the wind to the cairns as well as to the frightening poles. It might be pieces of birch bark, wooden slats or bundles of twigs. Anything will do as long as it flutters (cf. Finstad & Pilo 2010, p. 32). These “disturbers” would have hung down from sticks stuck into the cairns, or from the frightening poles. This explains why the reindeer would have panicked and trotted on more or less parallel to the rows of cairns and frightening poles until they reached the water, and also why the cairns have such an insignificant appearance today when the disturbers are no longer attached to them.

The Communal Reindeer Drive at Sumtangen

The “special trapping technique” that Indrelid & Hufthammer refer to from Sumtangen is based on a legend that they summarise, with some additions, as follows:

... a mass kill of reindeer took place in the sound [at Sumtangen] in ancient times. Herds of migrating reindeer were diverted towards the northern lake shore by means of drift fences made of long rows of human like closely spaced stone cairns or wooden sticks or poles creating funnel shaped systems. Floating lines were stretched out in the water, preventing the animals from swimming to the sides and escaping. Hunters in boats killed the animals in the water and dragged them ashore at Sumtangen where they were butchered. (2010, p. 3).

This description of how the drive was carried out has little to do with reality. The drive at Sumtangen consists only of a single line of cairns and frightening poles and shows that the reindeer entered Lake Finnsberg in its western part where it is widest. The hunters would most probably have waited in their boats on the opposite side of the lake until the reindeer had swum so far that they could no longer easily save themselves by turning back (cf. Blehr 1973). It was therefore not accidental that the drive ended at the shore just where it did: the width of the lake here would have given the hunters an opportunity to catch up with the deer before they reached the nearest shore (Blehr 1987, p. 90).

The “special trapping technique”, described by Indrelid & Hufthammer thus differs from the communal reindeer drives ending in water known to have been used traditionally by reindeer as well as caribou hunters. Indrelid et al. (2007, p. 132) acknowledge that this hunting technique, well documented from the Arctic, appears to
have been used in Hardangervidda as well, but they see it as one in addition to the technique using “rows of cairns with lines, as the legends tell about” (my translation). However, all the communal drives I have found differ from this description. Already after my first field season in 1970 it became obvious that in none of the reindeer drives I had found the row of cairns would have been able to hold lines that could have stopped frightened reindeer (Blehr 1971, p. 101). Nor did any of them consist of “long rows of human like closely spaced stone cairns or wooden sticks or poles creating funnel shaped systems”, as added to the legend by Indrelid & Hufthammer.

Apparently Indrelid & Hufthammer have taken the legend about communal drives at Sumtangen at face value from the start. Their statement that it was a special “trapping technique” used in the second half of the 13th century and different from the ones otherwise used, has not been verified. They simply state categorically that their research “confirms that the legend of the mass kill of reindeer at Sumtangen ... is based on real events that took place 450–500 years earlier” (2010, p. 10). But their conclusion is contradicted by the empirical data at hand.

Historical legends can in exceptional cases preserve information from the past over centuries. However, usually the particular event or events described disappear behind a general legendary motif in a relatively short time. In the legend from Sumtangen, as in the other legends from Hardangervidda, the use of floating lines as well as lines with or without bells between the cairns and the frightening poles are the most often recurring elements.

How Extensive Were the Communal Reindeer Drives at Sumtangen in the Middle Ages?
Sumtangen has attracted hunters again and again since the Middle Mesolithic (Indrelid & Hufthammer 2010, p. 2). The place, situated as it is between the summer grazing for the bucks further to the north and the central parts of Hardangervidda where they return for the rutting season in the fall, must have been extremely well suited for communal drives. The lakes created bottlenecks that forced the bucks to follow a limited number of routes during their seasonal migrations. From the fragments of bucks’ full grown antlers found in the middens (Grieg 1911, p. 12; cf. Bakke 1985, p. 105–106) it is clear that the communal drives took place when the bucks migrated south in the fall. This is confirmed by a study of antlers from an excavation at Sumtangen in 1972. Both sexes and all age groups were represented in the material, but with a slight overweight for buck antlers. Since such a male dominance is hardly likely in an area used by fostering flocks, where there would have been an excess of females and calves, this indicates that the area was mainly visited by bucks (Kjos-Hansen 1973, p. 78). Thus, in most cases it would have been bucks migrating south in the fall that were driven into the water.

Such flocks are, in contrast to fostering flocks, very small. The largest flock I ever encountered myself in the Sumtangen area consisted of roughly twenty bucks. But except for this flock, and another one of eight animals, all the others I observed over a period of four years consisted only of two to four bucks. Nor were single bucks unusual. Admittedly, these are anecdotal data (cf. Blehr 1997), but I believe they are of importance since they indicate that most of the flocks migrating south at the onset of the rutting season have consisted of only a few animals.

I should add that the success of communal drives were not “totally dependent upon the hunters’ ability to anticipate the dispersal and movements of the herds” (Indrelid & Hufthammer 2010, p. 8). Insight into reindeer behaviour on this level is simply not attainable. What the hunters had to know was that in the fall, bucks would pass by Lake Finnsberg, and that with the help of cairns and frightening poles as well as drivers, one could scare the bucks into the lake.

Who organised the communal reindeer drives?
As most of the animals driven into the water were bucks, and therefore they would only have arrived in small flocks, the annual yield could not have been devastating. This is confirmed by the Bayesian model of the bone dates. I therefore find it unlikely that the drives were organised by merchants. They would not have bothered to organise what would have appeared to them as rather insignificant hunts. Nor is that which has been
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presented in support of this hypothesis very convincing, as it is mainly based on some reindeer bones with runic inscriptions. Indrelid & Hufthammer do not believe that people from the nearby farming communities were literate. And so they argue that the inscriptions must have been made by town dwellers (2010, p. 8). However, it is commonly accepted that Medieval runes were in common use at least to 1400, if not later, for messages inscribed on wood or bone (Samnordisk runetexdatabas 2004). Runic literacy thus does not indicate any presence of urban merchants at Sumtangen.

Should I scrap my own old hypothesis concerning how the hunt had been organised and carried out and suggest a new, hopefully less fanciful one, then I would return to one that I presented already before I had started fieldwork in Hardangervidda (Blehr 1971). To wit: that the communal reindeer drives at Sumtangen should be seen in relation to iron production in neighbouring Sysendalen valley. Nicolay Nicolaysen (1861, p. 16) informs us that at Fet hamlet there have been found “40 worked steatites of which one in 1846 came to [Oslo] university’s collection”. A comparison of this stone with the ones from Sumtangen (Nicolaysen 1861, p. 25; Neggaard 1911, p. 37) might show that they are from the same quarry. Should this be the case, a Medieval connection between Fet and Sumtangen seems plausible. The production of iron, and the charcoal this process demanded, would have employed many people, and thus made the meat from reindeer killed at Sumtangen a necessary supplement to the food produced at Fet. Those in charge of the iron production would also have had the resources to organise a work gang to build solid stone huts for the men allocated to reindeer hunting at Sumtangen. This hypothesis is simply tentative, but further research might lend it more support than my former hypothesis, or Indrelid & Hufthammer’s present one. I find it intriguing that both near Jonndalen and Seterdalen valleys on the east side of Hardangervidda, there are extensive complexes with more than 100 and 50 pitfalls respectively (Blehr 1971, p. 100). Both valleys had a settled population depending on iron production in the Late Iron Age (Hougen 1947, p. 294). This dependency on iron production may have lasted into the Middle Ages. As may have been the case at Fet, the people who produced iron on the east side may also have had to depend partly on reindeer meat to feed their workers. That the reindeer were driven into pitfalls here instead of water should be seen as an adaptation to local conditions.

Conclusion

The picture of Medieval hunting at Sumtangen presented by Indrelid & Hufthammer could hardly be more different from the one presented by me. While I like to think of myself as committed to validation, Indrelid & Hufthammer appear more ready to draw conclusions that have to be speculations from what is considered probable (Indrelid 2010, p. 31). But it is not only in our attitude to empirical data that we differ. In my analysis I also take into account the relationship between the reindeer as a prey animal and humans as hunters. This relationship has always been determined by the possibilities and limitations inherent in the behaviour of reindeer as species and the weapon technology of the hunters. It should therefore not come as a surprise that prehistoric hunters at Sumtangen invented the same hunting method as known from the ethnographies of the more recent caribou/reindeer hunters all over the Arctic. Crucially, this hunting technique, based on communal drives, could never have had such a devastating effect on the reindeer population as suggested by Indrelid & Hufthammer.

Since the first radiocarbon dates back in the 1970s, we have known approximately when the reindeer drives at Sumtangen, as well as at other localities in Hardangervidda with large stone huts, took place. As to the hunting technique, that Neggaard understood already in 1911, the most efficient way for the Hardangervidda hunters to catch their prey was to drive the reindeer into bodies of water. What is still unsolved today is who built the solid stone huts and organised the drives. Above, I have suggested a tentative hypothesis, one that could begin to be tested by a comparison of the steatites from Fet and Sumtangen. If the steatites are from the same quarry, it could strengthen the hunch I have that there is a connection between the production of charcoal and iron at
Fet and the hunting at Sumtangen. Should this prove to be right, then some still not emptied charcoal kilns at Maurset, also in Sysendalen valley, might perhaps help us determine when the communal hunting might have ended. The fact that the charcoal was still in the kilns caused Nicolaysen, who visited Maurset in 1859, to conclude that something had happened to their owner. He suggested that it had to do with the Black Death (1861, p. 18).

I find this to be a reasonable assumption. Had the plague, abruptly as it seems, killed the men burning charcoal, it would not have ended with them. It would also have killed enough of the men engaged in the iron production, as well as among those hunting at Sumtangen, to put an end to these activities as well. But as reasonable as this line of argument might seem, it is not supported by the 15 radiocarbon dates in their calibrated form. Judging from them, it is likely that the communal drives at Sumtangen ended already in the early 14th century, that is, before the Black Death hit the area. However, three dates from the 1970s (fig. 3; Blehr 1973, p. 104), when calibrated, are consistent with an end date of about 1350, though with so few dates and such low precision it could have been a century later too (which does not fit with the devastating effects of the plague). Thus, it seems certain that the communal reindeer drives at Sumtangen did come to an abrupt end when the plague hit the area in 1349.

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References
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