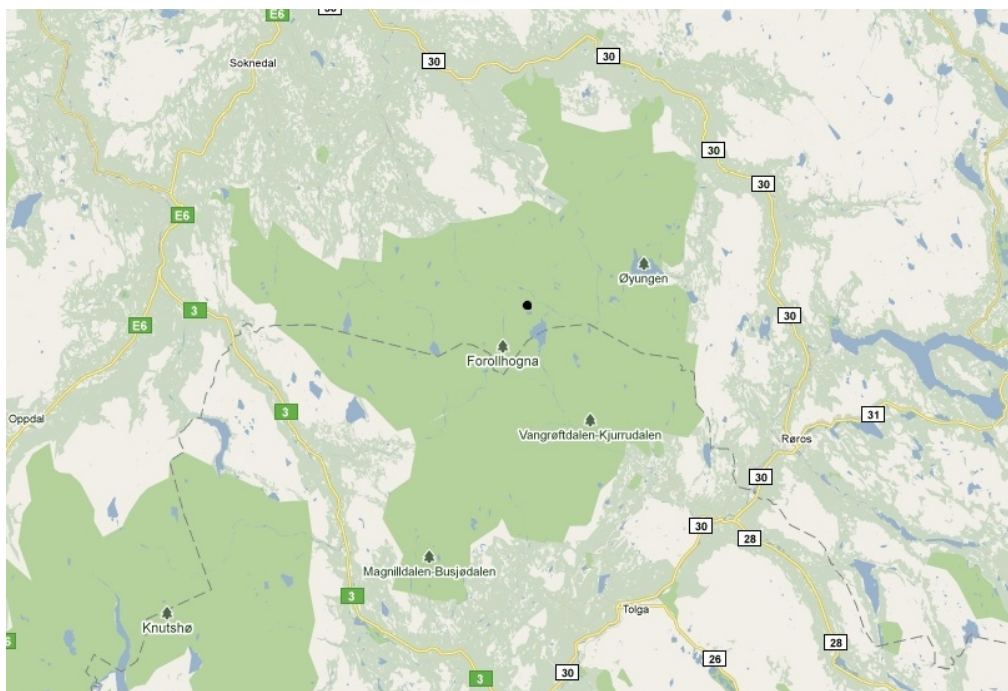


# Forollhogna National Park - and the management of the reindeer tribe living in the area

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**Forollhogna National Park is a mountain area in the middle of Norway bordered by valleys on all sides. In its centre the mountain Forollhogna (1332m) protrudes from the surrounding tundra-like grass surface. The total square meter is 1062km and the total of six municipalities meet at the top of the central mountain. The park is a favourable site for trips by feet up to the mountains and domestic animals use the areas near the valleys for grassing in the summer. The wildlife and the biological diversity is unique with rarely seen reinhay on the ground and probably most important the tribe of reindeers living in this fantastic national heritage area.**

My research project will be to investigate the management of the number of individuals in this tribe. Firstly I will give a short resume on reindeer as a species. A reindeer is an antlered ruminant and a herbivore, its size is between a small ruminant (sheep, goat) and a large ruminant (cattle). An adult animal is about 160cm high in this actual area – short-legged reindeer live here. It lives in arctic or sub-arctic enviroments making Norway a favourable site. They can be semi-domesticated animals – the Lapps in the neighbouring mountain area near Røros (Sør-Trøndelag) live from herding these animals. *It's important that these two tribes don't mix, because of herding and crossing of genes with the wildlified animals.*



A map-view of the site printed from google maps. The city of Trondheim is situated right north. (The black dot indicates where the picture below is taken).



The mountain Forollhogna viewed from north: in front the common path for walkers up to the mountain is seen. The wild reindeers can be encountered several times on one trip in the area as they appear in smaller troops.

I hope this general introduction will give a brief understanding of what I'm telling further on in this research paper. From now the article will contain the results from my research. My approach to this article was: "How do the government manage the number of individuals in the reindeer tribe living in Forollhogna National Park?" With the concern of over-herding (too many animals will exceed the ecological bearing capacity of the area) and taking too many animals away (threaten the survival of the tribe). In continuation I made some relevant questions and took contact with a man that stands very central in the management of the number of animals living in the area. By managing the area I mean how many hunting licenses that are given out to people willing to hunt these animals. My main question is "Is the license policy based on evidence or not?" As my further questions will be answered out this article I think that this will be very clear.

The general issue every year is: How many animals should be hunted? With other words: taken away. This number floats from 400 to almost 1000 animals. In the period from 20<sup>th</sup> of August and 20<sup>th</sup> of September licensed hunters can hunt animals in the area. After the hunting season is closed the animals goes into the breeding season – reindeers are monoseasonal short-day breeders, in other words: they are actively breeding in the autumn and through the winter. It's very important that they get pregnant in this period. From this I formulated my first question: "Does the government look at weather conditions in the

winter?" If it's a very cold and snow full winter the breeding probably goes worse affecting next seasons calf-number and thus the gain of individuals in the tribe. The answer to this is that in the spring when countings of animals is executed from helicopters the ratio between calves and female reindeers is recorded. In this way one can get an indirect indication of how the breeding in the actual season has been. Looking at weather conditions is therefore not needed, but may give an impression of next years hunting number.

A central factor leading to the conclusion of the number of licenses given each year is the countings, as mentioned, done in the spring. The number of individuals should be around 1700-1800 – that's the ideal number the government every year tries to reach by calculating the hunting number. The tribe is not collected in one troop; they spread all over the area. Furthermore the reindeers tend to move towards the wind direction, and can move very fast if strong winds exists. On behalf of this I formulated the question: "Is countings of the whole area done on the same day and wind conditions taken into account?" The simple answer to this was that it's done on one day and that the different troops were counted and written into a GPS-map of the area. This makes the countings very systematic and it's easy to see if some troops has migrated into each other, simply by later on the day finding a big troop that didn't exist in the morning, but on the GPS-map, made earlier on the very same day, two smaller troops is found right next to each other – this two troops has mixed while counting another area.

In extra another issue can be faced when the same assortment of people does this management every year: biased. When I asked this the response was very clear: The routine is done correct and very precise every year (according to counting and the ratio calf/female) and the number of licenses given is calculated from the observations done. One year it can be 400 animals that go on the marked for hunting, the next year: 800!

When summarising this I think that my main question is answered. It seems like the methods of managing this hereditary site are very good. The main factor of deciding the hunting number is the countings done in the spring, in addition the ratio between calves and female reindeers is taken into account. This may seem simple, but the area of Forollhogna is one of the best conserved wildlife areas in Norway and is a very popular site for spotting reindeers, and not only killing them with a rifle!

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Sources:

[http://en.wikipedia.org/wiki/Forollhogna\\_National\\_Park](http://en.wikipedia.org/wiki/Forollhogna_National_Park)

<http://en.wikipedia.org/wiki/Reindeer>

<http://www.hognareinen.no/>

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