Presentation on the Fertility in the Bernese Mountain Dog
Professor Bodil Ström Holst, associate professor at the Swedish University of Agricultural Sciences

Definitions:
Sperm motility – the ability of the sperm to swim and move
Sperm morphology – the size and shape of the sperm, Abnormal sperm have head or tail defects affecting the ability of the sperm to reach the egg

In a study of male Bernese, the amount, motility, and morphology of the sperm was investigated.
- The findings showed that only 34% of the dogs had more than 60% morphologically normal sperm.
- Dogs over the age of six years showed a decrease in motility of 28%, and a decrease in morphology of 20%.
- 53% of the dogs under the age of 7 years have at least 150 million morphologically normal sperm and 70% motile
- 43% of the ejaculates had an abnormal color indicating prostate problems
- 85% had a biomarker concentration indicating an enlarged prostate
- Prostate disease increases with age

Females were studied in the Pregurine Project
- 47 females in total, 16 of them were Bernese
- While 100% of other breeds ovulated, only 12 out of 15 of the Berners ovulated
- Mating was allowed by 10 out of 11 Berners, 30 out of 31 of the other breeds
- 64% (7/11) of the Berners that ovulated got pregnant, 87% (26/30) of the other breeds; the percentage is even lower if all Berner bitches are included, not just the ones that ovulated
- Berners have two major problems: not ovulating, and not becoming pregnant

A question was asked about litters being lost.
Answer: Samples are being collected to be analyzed and hopefully give more information about loss of litters. Low progesterone concentrations is one potential cause that is going to be investigated.

See the article "Semen quality of the Bernese Mountain Dog in Sweden"
https://stud.epsilon.slu.se/16913/1/lau_a_210414.pdf

And "Factors affecting reproductive performance in the Swedish Bernese Mountain Dog"
https://actavetscand.biomedcentral.com/articles/10.1186/s13028-022-00646-x#:~:text=With%20advanced%20age%2C%20bitches%20tend,breed%20%5B3%2C%2018%5D