Is Danish Venison Production Environmentally Sustainable?

The guidelines for New Nordic Diet recommends that Danes reduce their consumption of meat by 35%, and take 4% of their meat as venison, since venison is presumed to be healthier, more palatable and more environmentally sustainable than meat from domestic animals. Presently Danes consume only 0.8% of their meat as venison, and the consumption is very unevenly distributed; most hunters keep the main portion for themselves. A total of 2.6 million wild animals are reported shot by hunters each year in Denmark, and the possibility for increasing Danish venison production is limited, considering sustainable nature conservation at the limited area not already occupied by buildings and roads or exploited by agriculture.

The assumption that commercially produced venison is more environmentally sustainable than comparable industrial meat is rejected by the analyses in this report. Production of wild boar venison impacts the overall environment, characterized by i.e. monetizing and summing up 15 environmental impact potentials, twice as much as the closest reference meat type, i.e. pork; Production of wild boar meat impacts global warming 3 times more than pork. Production of duck meat impacts the overall environment 19 times more and pheasant meat 61 times more than chicken meat. Production of duck meat and pheasant meat impacts global warming 11 respectively 47 times more than chicken. On the other hand, commercially produced meat from red deer, roe deer, fallow deer impacts the overall environment by respectively 10%, 15% and 16% of the impact caused by beef production. The three deer species cause impacts ranging from 21% to 62% of the global warming impact of beef. But beef has the highest environmental impact burden of all meat types (when using high-end impact values for beef as in this report), 12 times larger than pork, and in terms of global warming 14 times larger than pork; and beef is of course only one possible reference meat to deer meat. From the point of view of environmental impact it is recommended to eat deer rather than beef, but pork rather than wild boar, and chicken rather than mallard or pheasant. And pork or even better chicken should be preferred over deer meat in terms of both the overall environmental impact and global warming. But perhaps deer meat is not better than beef, as this depends on the numbers used to characterize the impact of beef.

This study found that a surprisingly large mileage is covered by hunters in relation to transport. But the largest environmental impact in the whole life cycle of venison production is caused by feed/fodder. At the same time this is the most uncertain data, since it remains to be better quantified how much feed deer take from farmers’ fields, and how much they damage by trampling and disturbing crop growth and development. The supplied feed and fields planted for the benefit of wildlife and feeding off farmers’ fields are all included in this study with the best available data. For roe deer meat the environmental impact of feed made up 60% of the overall environmental impact of roe deer meat. For pheasant meat it was 95%. Finally it should be mentioned that venison may not always be free of antibiotics, coccidiostats and heavy metals.