

Knut Håkon Røed (1951–2026)



Knut Håkon Røed passed away on 8 July 2026.

Knut was born in Oslo in 1951. He completed his master's degree in marine biology at the University of Oslo in 1977. After two years as a project employee at the University of Oslo, he joined Hans Staaland's laboratory at the Norwegian Agricultural University, now the Norwegian University of Life Sciences (NMBU), as a research assistant. In 1986, he successfully defended his Doctor agric. thesis; "Studies on the genetic structure of populations of reindeer and caribou (*Rangifer tarandus* L.)". He subsequently worked as a postdoctoral scientist at the Norwegian School of Veterinary Science (NVH), now part of NMBU, where he conducted research on salmon and livestock genetics. In 1990, he was appointed researcher, and in the mid-1990s he became professor at NVH/NMBU. He remained at NMBU until his retirement in 2021.

Knut's passion for *Rangifer*, awakened during his years in Hans Staaland's laboratory, became the defining theme of his academic career. He followed, and contributed to, the rapid development of genetic tools, from studies based on protein variation and blood polymorphisms to mitochondrial DNA and nuclear microsatellites. These approaches enabled him to investigate the evolutionary history, population structure, and genetic diversity of reindeer and caribou (*Rangifer tarandus*), and he established himself as an internationally recognized expert in the field. In later years, he also contributed to mapping the reindeer genome and identifying genes associated with adaptations to the harsh Arctic environment.

Knut's research demonstrated how geographical barriers, historical migration routes, climatic changes, and human activities have shaped the genetic structure of *Rangifer* populations. He also investigated the genetic history of domesticated reindeer, showing that the origins of reindeer herding were more complex than a simple transition from local wild populations to domestic herds. His work highlighted the importance of cultural practices and human movements in shaping the genetic history of domestic reindeer. In several cases, genetic evidence indicated that present-day domestic herds originated partly from populations in other regions, reflecting historical translocation and movement of animals.

His work extended well beyond population history. Knut understood the value of genetics not

only for advancing basic science, but also for providing management authorities with a stronger scientific basis for assessing the status and long-term viability of reindeer populations. His studies of genetic diversity, together with long-term investigations of male age structure and reproductive success, contributed to our understanding of effective population size and the evolutionary consequences of herd management. Knut played a pivotal role in shaping the Norwegian management of wild reindeer, through his active participation in the “Wild Reindeer and Society” advisory group. Later, he was instrumental in designing and establishing a quality standard for wild reindeer, which includes genetic variation as one of its key metrics. Today, this quality standard forms the basis for national and local action plans aimed at improving the quality of wild reindeer habitats and populations.

The emergence of Chronic Wasting Disease (CWD) in the Nordfjella wild reindeer population in Norway was a particular concern. Knut recognized early that genetic variation could influence susceptibility to infection and became a driving force in research investigating genetic variation in genes associated with disease resistance and susceptibility.

Knut's scientific contribution was remarkable not only for its breadth but also for the extraordinary number of collaborations it generated. His work spanned genetics, ecology, archaeology, veterinary science, conservation, and reindeer pastoralism, also including genetic works on other ungulate species as well as horses. His laboratory became an important hub for research on the genetic history and diversity of *Rangifer*. His scientific network extended across the circumpolar North.

Knut was a generous scientist and an open-minded colleague. He was always willing to share his knowledge, discuss new ideas, and explore connections across disciplines. Many PhD students benefited from his supervision, encouragement, and extensive knowledge. For Knut, science was never simply an individual endeavour; collaboration and the exchange of ideas were central to the way he worked.

Few, if any, scientists have published as extensively on the genetics of reindeer and caribou or collaborated with so many researchers working on *Rangifer*. He became the “grand old man” of *Rangifer* genetics—a trusted colleague, an important scientific resource, and a central figure in the international *Rangifer* research community. His scientific collaborations also developed into close and lasting friendships with colleagues in Norway and abroad.

After his retirement, Knut had more time to enjoy the things he loved outside academia: hunting, fishing, gathering, and spending time with his family. He was an excellent cook and took great pleasure in inviting family and friends to share good food and good company. Yet retirement did not mean withdrawing from science. Knut remained engaged with the research community and continued to contribute his knowledge and experience to *Rangifer* research and management.

He is survived by his wife, Åse, their two children, Guro and Pål, and three grandchildren. We extend our deepest condolences to Åse and the entire family.

Knut, you will be greatly missed.

Øystein Holand and Olav Strand