FIELD RESEARCH: JUSTIFICATION AND RESULTS

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Wildlife research in Norway has to a great extent always used new methods and new technology to achieve the best possible knowledge for future management. Some of these new methods have revolutionized our knowledge about many species including large carnivores, ungulates and small game. Two such methods are radiotelemetry and DNA-analysis; the former regarded as an invasive method whereas the latter is a typical non-invasive method. From the early start of using radiotelemetry in Norwegian wildlife research in the mid-1970s, this technology has continuously been refined. This has resulted in smaller, lighter, longer-lasting and more accurate transmitters, all of which improves the welfare of experimental animals. However, one crucial point which always has to taken into consideration is if animals change behaviour due to being radiotagged. If this is the case, the data gathered from an experiment is useless. Hence, one of the major focuses has always been to make sure that animals equipped with transmitters show normal behaviour. Only if this criterion is fulfilled, can radiotelemetry give us the information necessary to meet the increasing demand for precise ecological knowledge. Here I will present results from ongoing research in the Scandinavian wolf population where both invasive (radiotelemetry) and non-invasive (DNA from faeces), has been used either separately or in combination to elucidate questions related to population dynamics, population genetics and/or urgent management questions. From small game research, results will be presented from studies of willow ptarmigan, answering questions regarding sustainable harvest or the potential impact of windmills.