

What is “wise use” and “acceptable disturbance” of wildlife in protected areas? On balancing nature protection and recreation.

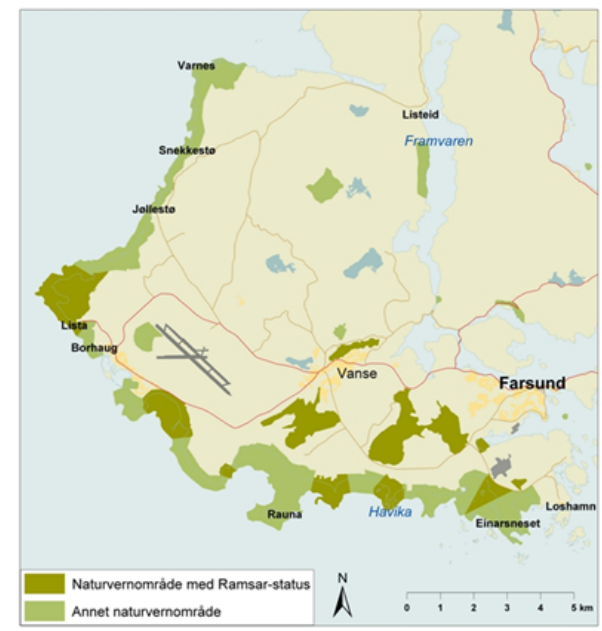
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Introduction

The premise for this presentation is several examples from Norway where fauna (e.g. birds, wild rein deer), both within and outside protected areas, are (potentially) disturbed by human traffic and recreation. When should “fauna disturbance” be regarded as an ecological problem, an animal welfare challenge, a violation of the protection goals, or as acceptable? Le Corre et al. (2009) have reviewed international literature on bird disturbance, since they have similar challenges in protected areas along the coast of Brittany, France.

A study from the Lista seashore, at the southern point of Norway, can illustrate the issue (Vistad 2009). It concerns the balance between nature protection (primarily birds and bird habitats) and water based board sports, namely kite-boarding, sailboarding and windsurfing. There is a continuous row of protected areas along this seashore (see figure). Several of them are designated Ramsar-sites and should be managed in accordance the Ramsar-convention and the local regulations. Some of these protected areas overlap with public recreation areas, but here the traditional and land based outdoor recreation is given priority; water based board sports are mainly prohibited, even though the Lista seashores are of national importance for these board sports (due to the natural conditions). The reason is that the birdlife should be protected from disturbance, but the traditional land based activities seem to be less questioned about the disturbing effects.

A revision of the management plan for the protected Lista areas is now being prepared, and it is time to raise some principle issues and discuss challenging concepts like un-/acceptable disturbance, the precautionary principle, sustainable use of protected areas, the societal position of new/modern outdoor recreation and knowledge based management of protected areas.



The Lista area, Norway. Ramsar sites in dark green and other protected areas in light green (www.miljostatus.no/Vest-Agder).

The Ramsar and Bio-Diversity conventions

Both the Ramsar Convention on Wetlands (1971) and the Convention on Biological Diversity (1993) elaborates the importance of combining conservation and sustainable use. The Ramsar Convention homepage (www.ramsar.org) talks about *wise use of wetlands*, defined as “...the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development. Wise use therefore has at its heart the conservation and sustainable use of wetlands ...”. So, a Ramsar site is not supposed to be protected from people, but shall “promote the conservation of the wetlands..., and as far as possible the wise use of wetlands... “. So what can be regarded as wise use? What is good governance of protected wetlands or more generally of protected areas?

What is ‘acceptable disturbance’? The management challenges.

There is great variance in how, when and why different birds and species react to an approaching human, and the actual response is influenced by several local environmental conditions. Level of habituation to human presence is an important factor (Nisbet 2000). These responses can be regarded as the birds’ natural/learnt responses to what they experience as (possible) external threats. Their behaviour is quite similar to their responses towards natural enemies in their living environment, and thereby an expression of how e.g. the actual bird species naturally function and adapt. As a management strategy this *ecological function based approach* therefore can accept some human disturbances, but is also based on the premise that the actual individuals/stocks must be in a good health condition and fill their natural function in their natural environment (e.g. Arlinghaus et al. 2007).

It is the behavioural response of the individual bird or the present flock that can be directly studied, and Le Corre et al. (2009) show that these short term effects dominate the literature, and not the more important long term impacts on the populations. Consequences from disturbance on the population or species level are not easily observed, but this is the relevant and important scale level when we are focusing on “*the maintenance of their (the wetlands) ecological character...*” (the Ramsar Convention), seeing the actual *vulnerability* of the stock/species as the important factor.

What is relevant knowledge?

Good and respected management decisions must be based on relevant and trusted knowledge. In a case like Lista, the studies of the actual response among individual birds or flocks of birds are not sufficient. The important level is the ecological function of these birds' living environment, and a possible cumulative human impact assessment (Le Corre et al., 2009; Therivel & Ross, 2007). The Lista project also shows the relevance of detailed knowledge about the spectrum of human and recreational activities. As Le Corre et al. (2009) state: The specialized coastal activities are most focused on the management, but may be the dominating (and at Lista: accepted) activities, like walking with/without a dog are actually more disturbing for the birds?

The potential for combining both bird protection and (acceptable) recreational activities lies in this combination of relevant ecological knowledge, and knowledge about human activities and various site conditions. Le Corre et al. (2009) ask for more interdisciplinary research. The present strict management regime has mainly been based on the precautionary principle, with frustration, lack of trust and low legitimacy as a result (Dommelen, 2000).

References

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