

Conflict Management – Case studies from the Austrian Natural Forest Reserve Programme

Janine Oettel, Georg Frank, Herfried Steiner, Sebastian Lipp

Department of Forest Growth and Silviculture, Austrian Research Centre of Forests (BFW), Vienna, Austria

Abstract

The Austrian Natural Forest Reserve Programme consists of 195 Reserves, mainly represented by small scale areas of 5 to 20 ha in size. This large number of individual areas requires a lot of monitoring und maintenance activity. Furthermore, various conflict events occur. Conflicts can generally be distinguished between legal issues, such as contract violation or traffic safety measures, nature conservation demands including browsing by game or neophytes and public interests contrary to the protection aims of the programme. Though legal standards and regulations exist, case studies make clear that each situation needs to be evaluated separately in order to find a compromise between all stakeholders.

Keywords

Natural Forest Reserves, conflict, legal issues, nature conservation, public interest, bark beetle infestation, species protection

Introduction

Natural Forest Reserves (NWR) are areas of nature conservation by contract which ensure a natural development of ecosystem without any forest management activity. The areas represent the potential natural forest communities (PNWG) as best as possible. Currently, there are 195 NWR with a total area of 8400 ha in the Austrian Natural Forest Reserve Programme, started by the federal government in 1995.

For each NWR a contract between the forest owner and the Republic of Austria, represented by the Federal Ministry for Agriculture, Forestry, Environment and Water Management (BMLFUW) is concluded. This agreement defines the rights and obligations for both contracting parties. The forest owner commits to refrain from all forestry uses and receives an annual compensation in exchange therefore. Exceptions are hunting, legally required measures and interventions necessary in order to prevent liability claims.

A regular support of the contract areas is necessary, including monitoring and maintenance measures. The workload is correspondingly high because of predominantly small areas of 5 to 20 hectares in size. Additionally, once per year forest owners report about occurring events in the NWR, such as wind throws, bark beetle infestations or browsing by game. However, such natural events are not the only arising problems, which need to be discussed and solved. Conflicts emerge when different interests or demands meet, such as existing treaties and laws, but also social claims or contradictions.

According to the contract ('Agreement on the NWR [...]') forest owners have to inform the contract partner, respectively the supporting body (Federal Research Centre of Forests - BFW), in case of an event, whether this concerns requests or legally required measures. For each case or event a technical evaluation in cooperation with BFW and if necessary the Forestry authority is essential.

Conflicts

In 22 years, a large number of requests and problems arise. Although the list is incomplete it allows a general overview. Commonly occurring cases include browsing by game, forest pest infestation, forest pasture and requests for hunting infrastructure, a trail construction or protection facilities (rockfall protection).

The large number of reported cases can be distinguished into three categories. **Legal conflicts** emerge when the protection objective or measures are contrary to applicable laws. On the one hand there is contract violation per se, on the other hand are cases like a mass reproduction of forest pests or required traffic safety measures. **Nature conservation problems** are neophytes occurring in the reserves or a vegetation development that differs from the favourable conservation status (Natura 2000). Often **public interests** such as recreation demands or property protection function of a forest are not in line with an undisturbed forest development.

Discussion of Case Studies

Forest Pest Infestation

According to the Austrian forestry law, forest owners have to observe and control their forest regarding a mass reproduction of forest pests and to report about a critical development to the responsible forest authority (§ 43 ForstG). Is a pest infestation increasing in a dangerous manner, the forest owner has to immediately act (§ 44 ForstG). The NWR contract contains the authorisation of 'legally compulsory interventions' as well. Given a large number of small NWR this is necessary since a potential endangerment of neighbouring stands frequently occurs.

Following the usual procedure, the forest owner must immediately report a detected pest infestation to the forest authority and the supporting body of the contract partner (BFW). During an on-site visit all stakeholders discuss and define necessary measures. The examples below outline different decision possibilities. In all cases a bark beetle infestation (*Ips typographus*) followed a wind throw event.

First reserve is about 10 ha in size and bordering two neighbours. Bark beetles (*Ips typographus*) attacked thrown and broken spruce trees after a storm event. In agreement with BFW, the infested trees were debarked. A possible expansion to other trees as well as to neighbouring stands was carefully observed and not detected. Another bark beetle attack a few years later was successfully combated as well by a fast reporting, assessing, deciding (in agreement with BFW and the forestry authority) and acting. The trees concerned were cut down and debarked, but left in the NWR.

The second area, about 100 ha in size, was affected by wind throw on an area of 7 ha located at the southern border of the reserve. The neighbouring stand is an object protecting forest, so it was very important to avoid a propagation of the bark beetle infestation. During an on-site visit, forest owners, forestry authority and BFW discussed the situation and possible solutions. Due to the high risk of propagation (southern slope, spruce dominated forest) the affected area was excluded from the NWR, in order to allow timber processing and an efficient bark beetle control. Subsequently, the contract agreement was adapted in size and payment.

In the third example a bark beetle infestation spread so quickly and severely after a wind throw, that the forestry authority had to order a clearance (§§ 44 and 45 ForstG). The impact of combating measures, infestation in the following years including the necessary control measures, and an expected propagation resulted in the termination of the NWR contract.

Species Protection

In a Natural Forest Reserve in Upper Austria, there was a request regarding the protection of *Asplenium adiantum-nigrum* (black spleenwort). The fern species is extremely rare and threatened by extinction in the province of Upper Austria. In detail, the question concerned the removal of competing vegetation, such as blackberry or ivy, as well as of foliage around some individual plants. During a local assessment of the situation it came out that the fern is not affected by competing vegetation (probably also not for the next 5 years) because it grows under a closed canopy alongside a path. A removal of leaf litter around individual plants by hands does not endanger the protection objective of the reserve as such and is allowed.

Public Interests

In a NWR in Carinthia, three rock climbing routes for private use were requested. The on-site visit of the forest owner, BFW and the 'applicant' resulted in a technical permission. The influence on the NWR was classified as marginal, because measures would concentrate on a very small area close to the NWR border (20 m), not expecting a major disturbance.

Another request regarding the construction of a trail for tourist use in a reserve of 10 ha in size, however, had to be rejected from a technical point of view. On the one hand the construction itself is not allowed; on the other hand would the effects of construction as well as of the subsequent traffic safety measures be significant.

The arguments for permitting the reconstruction of an existing historic trail after snow breakage and landslide in another NWR were based on the marginal influence of the reconstruction work on the total reserve area of 210 ha and the high importance (necessity) of the trail for hunting and research in a very steep terrain.

Conclusion

The case studies presented demonstrate the diversity of potential 'conflicts' or 'concerns' in NWR. Each of them requires an individual analysis and decision. Of course, valid legal norms and laws exist that have to be followed. Beyond that, it is about trying to find the best possible compromise to preserve the NWR, in order to allow a natural development process but also to meet different social demands.

Cooperation of forest owners, authorities and all stakeholders involved is necessary, not only for a sustainable conflict solution; it creates respect and understanding for the different opinions. Therefore it is a key element to ensure the success of the Natural Forest Reserve Programme.

Contact

Janine Oettel

janine.oettel@bfw.gv.at

Austrian Research Centre for Forests (BFW)

Department of Forest Growth and Silviculture

Seckendorff-Gudent-Weg 8

1131 Vienna

Austria

