Management of landscapes Within the Framework of Nature Protection

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INTRODUCTION

In Latvia, the most important landscape areas and sites have historically been included in various categories of specially protected nature territories (SPNT). This approach is also established in the regulatory framework. According to the law "On Specially Protected Nature Territories", the common goal of protected territories is to include the protection and conservation of unique, beautiful and Latvian-characteristic landscapes. However, only half of the eight identified categories of protected territories – national parks, biosphere reserve, nature parks and protected landscape areas – take landscape-related aspects into consideration. Practically all of these specially protected nature areas were also included in the network of Natura 2000 sites, the main purpose of which is to ensure the protection of protected biotopes and specially protected species habitats. To assess issues of whether nature conservation creates synergies with landscape management and to what extent, we performed quantitative and qualitative data analysis.

MATERIALS AND METHODS

The calculation uses data from the European Environment Agency's NATURA 2000 database for these areas – (SPNT area) and biotopes (the area of protected habitats). For the map display of the proportion of specially protected nature areas and the included protected biotopes, ArcGIS mapping software was used. The spatial data layers on SPNT's are derived from the nature data management system OZOLS. Likewise, an analysis of the long-term protection targets of SPNT's has been carried out by summarising the keywords therein. The descriptive words are displayed with text visualisation tools that illustrate the words according to their frequency of mention.

RESULTS

The proportion of protected biotopes is determined for all 55 landscape-related SPNT's in line with the law "On Specially Protected Nature Territories" (4 national parks, 42 nature parks, and 9 protected landscape areas). The average proportion of protected biotopes in the landscape-related SPNT's is 21%; however, its range is very wide – from 5% to 98%. When assessing the proportion of protected biotopes by SPNT category, there are no significant differences between nature parks, national parks and protected landscape areas – the proportion of protected biotopes varies from 20% in nature parks to 23% in protected landscape areas. The most frequently mentioned descriptive word in the long-term protection targets of SPNT's is biotope protection, while in one fifth of the considered SPNT's, the long-term protection targets don't even include landscape-related aspects.

DISCUSSION

The study results revealed the different approach to defining SPNT's in Latvia, the individual non-conformities in relation to the regulatory framework, as well as a number of challenges to landscape management. The analysis of nature conservation targets shows that the main emphasis is on the protection of habitats and species; however, landscape-related aspects are also defined generally. Characteristics such as socio-economic development, recreation, cultural and historical heritage, landscape values, tourism, nature education are mentioned. In the context of landscapes, the long-term goals most often mention cultural and historical heritage, landscape conservation, landscape structure and aesthetic value; however, these goals are general, mostly only detecting that the site has a landscape value and expressing the need to preserve it. The performed analysis of the targets and the relatively small proportion of biotopes in the Natura 2000 areas indicate that the ecological network in Latvia should

be improved, not only by specifying the protected areas, but also by a more targeted separation of conditions for nature protection and for landscape management in the regulatory framework. In particular, in view of the fact that landscape management in Latvia is primarily implemented through spatial planning.

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KEYWORDS: Landscape management, Natura 2000 network, Nature protection