

Ecological Corridors: Essential for a green future?

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The ever-increasing population creates the need for more homes and larger industrialized areas. This fact is relevant to virtually all cities in Scandinavia today, but may come at the expense of important wildlife habitats and ecosystems, which are in danger of habitat fragmentation. In this project, we therefore focused on ecological corridors, or wildlife corridors, and looked closer at the importance of the wildlife corridors in Trondheim.

The fragmentation of ecosystems is a known problem for biodiversity in the whole world. Roads, settlements, or other forms of human interventions, create artificial barriers between habitats. As a result, different populations no longer meet, and gene flow is reduced by making it more difficult to find an unrelated mate. In addition, it becomes harder for migrating animals to find new resources or re-colonize areas where species have gone extinct. One solution to this problem could be found in ecological corridors. They function as transitions between fragmented nearby habitats and promote the distribution and migration of individuals, and thus the exchange of genes. In Trondheim, there are particularly two corridors of importance: The Leinstrand corridor and the Leirelv corridor. These link the two big hiking areas near the city that are used for recreational activities. The passages are also subject to strong pressure from developers, and construction interests are threatening the sites. Because of this, we wanted to know how important the biodiversity, which is at risk if the corridors are to be removed, in the hiking areas and in general, is for most people. We hypothesized that citizens might not be aware of the function and importance of the area, and our goal therefore was to inform hikers and other nature lovers.

During this thesis, we found that wildlife corridors in Trondheim are of vital importance for migratory species such as moose and deer, bats, and the critically endangered hazel hen. To identify how most people feel about biodiversity in relation to construction needs we conducted a survey that was distributed via social media and email, and answered by over 350 people between 16 and 67 years old. Of those, only 1.52% stated that residential development is always more important than biodiversity. The corridors have been shown to be a crucial factor in avoiding habitat fragmentation between the eastern and western parts of Trondheim, and are not only important for the conservation of animal and plant life, but also for recreation and hiking for the people living in the city. It is therefore particularly desirable to preserve these areas and invest in residential densification in places that do not endanger sensitive natural habitats. Our conclusion was that the people living in Trondheim, and the driving force behind private development plans, needed to be informed of the function of the Leinstrand-, and Leirelv corridors. We therefore designed an educational poster that hikers and residents around Leinstrand and Leirelv might find informative and interesting. Furthermore, we are planning an article in the local newspaper to make people aware of the issues, so that hopefully more informed choices can be made.