Even though a long-term urbanisation trend in Finland has continued since the beginning of the 2000s, and the popularity of urban living is increasing, urban residents still wish to have peaceful natural areas near their homes. These are among the findings of the latest of a series of wide-ranging surveys of urban residents, carried out in 2016. The survey also spotlights three key factors perceived as creating pleasant residential areas: a good location and transport connections; the existence of natural environments nearby; and peacefulness. Respondents to the 2016 survey rated location and transport connections as the most valuable factor for the first time. In previous surveys peacefulness was rated highest. The proximity of natural environments has maintained its position as the second most important factor affecting residents’ satisfaction.

Infill developments contribute to many sustainability goals in terms of urban planning, for instance by improving accessibility, reducing traffic, and supporting local services. But infill developments in green areas can be harmful in various ways. Attitudes to infill developments vary considerably among Finns. More than one third of the survey respondents approve of infill developments in their neighborhood, as long as they have a chance to influence the locations of developments through transparent planning procedures. On the other hand, more than one fifth do not approve of any kind of infill development in their neighborhood. Attitudes have changed in recent years, since back in 2010 more than half of respondents were favourable towards infill developments in principle. This indicates that the presence of pleasant natural areas is widely seen as a significant aspect of residential areas. This factor should be taken into account when planning infill developments.
Urbanisation still continuing

Compared to other European countries Finland has only urbanised quite recently. The numbers of people living in densely populated areas have continued to grow steadily since 1980. In 2015 more than 70% of Finland’s population lived in the country’s 34 largest urban areas. Altogether 84% of the entire population (4.6 million people) today lives in densely populated settlements of different sizes from villages to cities.

Though the proportion of the population living in built-up areas has grown, their average population density has declined. These population centres have grown more spatially than in terms of density. There has particularly been a trend towards the building of detached houses in formerly undeveloped areas, creating a dispersed urban structure. This phenomenon of “urban sprawl” has had many negative environmental impacts, such as an increase in the use of private cars. In the 2010s, however, this trend has slowed considerably – at least partly due to economic recession – and especially in larger urban areas new developments have tended to increase the density of existing built-up areas more than further expanding the urban sprawl.

Even in the central districts of Finnish urban areas as much as 30–40% of the land area consists of green space. Urban planning consequently consists of a continuous balancing act striving to create efficient urban structures and promote sustainable transportation, while also ensuring that towns and cities remain green and pleasant places to live.

In the early 2000s, urban areas in Finland particularly spread into adjoining areas formerly covered by forests. An emphasis on infill development in the 2010s has more recently increased pressure to build on green areas within towns and cities. Although currently planned developments in Finland’s largest urban areas mainly focus on already built-up areas, almost a quarter of new construction projects are still located in forests and other natural areas. On the margins of urban areas more than half of all new buildings were constructed on previously green areas.

The total area covered by densely populated areas around Finland has grown steadily since 1980, by more than 80% in all. In 2015 about 84% of the Finnish population (4.6 million people) lived in densely populated areas.

The overall downward trend in the average population density of built-up areas around Finland was fastest during the economic booms of the 1980s and early 2000s, but slowed noticeably during the recession of the 1990s, and has almost levelled off since the recession of 2008-2009.

Locations of new developments in urban areas

Between 2012 and 2015, new developments in Finland’s eight largest urban areas focused mainly on already built-up areas. Between one fourth and one third of developments replaced forests or other natural areas. In these figures urban areas have been defined for physically connected conurbations, regardless of official municipal boundaries. Source: Corine Land Cover 2012, Finnish Building and Dwelling Register (BDR)
Urban nature highly beneficial to residents’ wellbeing

Since access to natural areas has been scientifically proven to benefit people’s health, it is important to ensure that even in cities that are growing progressively denser, residents should still have access to nearby natural areas.

Various studies have shown that spending time in natural areas has a positive impact on people’s mental and physical wellbeing, by easing stress and lowering their heart rate and blood pressure. Spending time in natural areas also exposes people to microbes, thereby strengthening their natural defense mechanisms against autoimmune diseases such as allergies and asthma.

Nature-based solutions can be used to complement and even replace technical systems in cities and buildings. This can also facilitate adaptation to climate change. For example, the risk of urban floods is likely to increase as precipitation rises and extreme weather events become more frequent. Urbanisation in general, and particularly the spread of impervious surfaces such as asphalt, further increase the risk of urban flooding. Favourable means to prevent urban floods include the creation and restoration of green areas that can absorb and retain excess stormwater, such as wetlands, ponds and stormwater basins. Green walls and roofs provide protection from excessive heat, while also enhancing biodiversity in built-up areas. Roofs and other elements of built-up areas can also be harnessed for food production.

Urban bird populations on the rise

Built environments are the only habitat type in Finland where the numbers of threatened species have decreased during the 2000s.

The populations of 13 bird species associated with man-made environments have increased considerably over the last four decades in Finland, with a peak in the early 2000s. Despite the recent downturn, the populations of these urban bird species remain one third higher on average than at the end of the 1970s.

All of the selected indicator species can be found in urban areas, and several even thrive in city centres. The indicator species include the blue tit and the jackdaw, which are both among the birds whose populations have lately increased most rapidly in Finland. Blue tits have benefitted from increasing winter-time feeding, while the reasons for the jackdaw’s recent success remain unclear. Both species – and many other birds included in the indicator – have been helped by milder winters. Eight out of the thirteen indicator species are year-round residents or only partial migrants, and their survival rates are closely linked to winter weather conditions.

Not all urban birds are thriving today, however. Numbers of house sparrows and house martins have especially declined steeply – though their decline is more likely related to changes in agricultural environments than in urban habitats. House sparrow populations are evidently faring better in cities than in the countryside, where changes such as a widespread decline in cattle grazing have reduced the availability of their preferred food.

Greenfinch numbers, which earlier rose steeply, have not bounced back from a crash caused by the Trichomonas gallinaceae epidemic in the late 2000s, and their total population in Finland remains 50% lower than a decade ago.
A network of national urban parks has been set up in Finland during the 2000s, aiming to preserve urban nature and valued cultural environments as coherent elements of urban areas. The first national urban park was established in Hämeenlinna in southern Finland in 2001, and today there are eight national urban parks around the country with a total area of 180 square kilometres, including land and water.

To qualify for inclusion in the national network, an urban park should contain areas valuable for their biodiversity. The park should also be sufficiently large and structurally coherent to form effective ecological corridors that enable species to move. These green areas should interlink to provide coherent connections between central parts of the urban area and surrounding natural or rural areas. These objectives for national urban parks should be duly considered in land use planning processes to ensure their preservation. Parks, recreational areas, protected areas and other kinds of green space may all be included in a national urban park. Whenever a national urban park is established, a related management plan must also be created.

The Finnish Environment Institute (SYKE) is actively studying and developing tools to facilitate the effective integration of considerations related to biodiversity and the benefits of natural areas into land use planning. The key objective here is to comprehensively map out the various valuable aspects of natural features for this purpose.

Sources


www.biodiversity.fi

Authors: Maija Titu, Ari-Pekka Auvinen, Arto Viinikka, Antti Rehunen and Eija Järvinen

Layout: Marianna Korpi | Cover photo: iStock | Helsinki, 2017 | environment.fi/SOER2017