

Infographic: How do urban environments drive genetic change?

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1. Air pollution may favor the adaptation of organisms to become more stress-resistant than their rural counterparts. There is some evidence that pollution might also increase the rate of genetic mutations.
2. Parks and green spaces not only offer potential habitats for species that have moved from the countryside, but may also provide corridors between different urban subpopulations and thus facilitate gene flow.
3. Human transport creates higher levels of habitat disturbance. But cars and other vehicles may also help disperse small organisms, potentially facilitating gene flow between different populations and increasing genetic diversity.
4. Nighttime illumination disrupts multiple aspects of organisms' biology, from sleep cycles to mating behavior. Long-term exposure to light at night may favor the evolution of lower light sensitivity, or even light avoidance.
5. Elevated temperature in cities—the result of heat absorption and radiation by buildings and asphalt—may drive the evolution of populations with higher heat tolerance, and lower cold tolerance, than their non-urban counterparts. However, reduced snow cover in cities could also favor cold-adaptation in some plant species.
6. Human food waste provides animals with a diet that is often high-sugar and high-fat. Some studies have found evidence of evolutionary adaptations associated with changes in metabolism to accommodate this diet.
7. Physical obstacles such as buildings and roads can fragment the habitats of urban species, potentially blocking gene flow among subpopulations and reducing genetic diversity.

Read full, original post: [Infographic: How Cities Influence Evolution](#)