Wild Animal Welfare in Local Policies on Land Use and the Built Environment

Experts increasingly agree that the health of humans, animals, and the environment are linked. As cities consider how to make their infrastructure more resilient and sustainable, policymakers and other local actors have an opportunity to adopt new policies that can benefit wild animals, humans, and the environment. This first-of-its-kind policy brief describes how cities can incorporate wild animal welfare considerations into their institutions, planning processes, and policies on land use and the built environment. The brief also identifies promising policy options for cities to consider, ranging from bird-friendly building materials to green infrastructure design and prohibitions on gas leaf blowers.

What is Wild Animal Welfare?

<u>Wild animal welfare</u> is the biological, behavioral, and mental functioning of individual wild animals that can range from generally negative to generally positive. Improving wild animal welfare is a matter of ensuring that individual wild animals experience more positive states like pleasure and fewer negative states like pain where possible. While this is an emerging academic field with a need for further research, welfare scientists have developed the Five Domains Model and other models for measuring animal welfare.

The conditions in cities can create risks and benefits for individual wild animals. For example, research indicates that exposure to air pollution in cities may harm the health and fitness of house sparrows and reduce their welfare. On the other hand, access to high quality forage, especially seeds, may benefit house sparrows and improve their welfare.

Overarching Approaches for Introducing Wild Animal Welfare into Local Policy

- Include wild animal welfare in ongoing city planning processes. Cities can incorporate wild animal welfare into existing plans for biodiversity, climate action, green infrastructure, open space, urban forest, capital investment, and more.
- Include monitoring of animal welfare in existing wildlife monitoring. Cities can gather data about wild animal welfare, for instance by collecting data on rates of disease and starvation, or exposure to noise, light, air pollution and extreme temperatures.
- Establish a city animal welfare office or official. Cities can establish an animal welfare official or office to facilitate coordination across city agencies on policies to support animal welfare. Amsterdam, Netherlands and New York, NY have officials or offices.
- **Develop an animal welfare planning process for the city.** Cites can create a specific planning document for animal welfare, like Amsterdam's <u>Animal Agenda</u>, which identifies policy actions, coordinating agencies, and financial allocations to support animal welfare.
- Pass wildlife ordinances incorporating wild animal welfare. Cities can pass science-based wildlife ordinances that include policies to support wild animal welfare on private land. Los Angeles, CA and Brunswick, ME have wildlife ordinances.

Examples of Local Policies on Land Use & the Built Environment that Benefit Humans, Animals & the Climate

In addition to overarching approaches, cities can adopt discrete local policies that may benefit wild animals, humans, and the climate. The brief compiles a non-exhaustive list of policy options.



Examples of Local Policy Options Described in the Policy Brief

Policy Category	Example Recommended Local Policy Option
Green Infrastructure	Update design manuals and technical guidance to promote plant selections that provide habitat, shelter, and food to wild animals. Example: Lancaster, PA requires consideration of "wildlife value."
Tree Canopy	Pass ordinances to protect large, mature trees that may provide the <u>greatest</u> benefits to wild animals. Example: <u>Washington D.C.</u>
Ecosystems	Develop green corridors prioritizing connectivity for wildlife movement between intact patches of habitat. Example: Medellín, Colombia.
Buildings & Developments	Require bird-friendly materials in new buildings and major alterations. Example: New York, NY.
Lawns & Open Spaces	Prohibit gas lawn equipment (including gas leaf blower) operation and sale. Example: Maplewood, NJ.
Roads	Build wild animal overpasses/underpasses to reduce collisions that harm humans and wild animals. Example: Los Angeles, CA.

Examples of Potential Benefits of Policies for Wild Animals, Humans, and the Climate

Wild Animal Benefits

- Reduced exposure to extreme heat and air pollution
- Reduced noise stress that alters animal behavior, movement, fitness, foraging
- Reduced building and vehicle collisions that cause animal suffering and death
- Improved access to high-quality food and shelter and habitat connectivity

Human & Climate Benefits

- Reduced exposure to extreme heat and air pollution
- Reduced greenhouse gas emissions and improved building energy efficiency
- Reduced flooding, water pollution, and water use
- Improved mental and physical health from access to green spaces, safer roads, and pedestrian spaces





