



Releaf

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# Reintroducing Key Wildlife Species in Dunfermline

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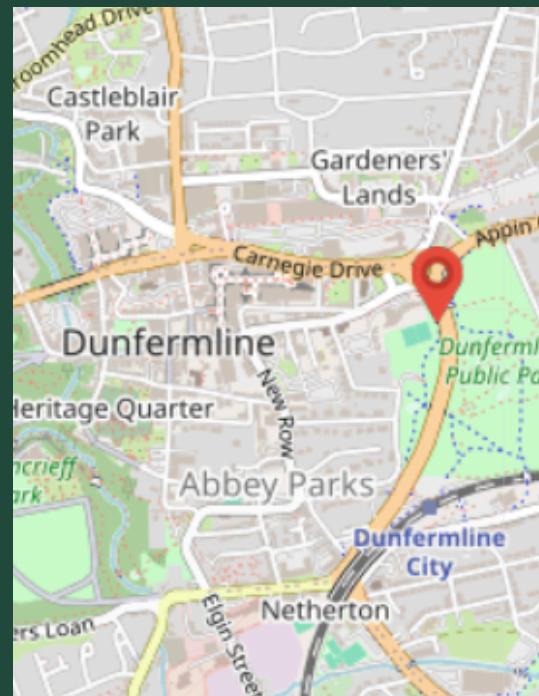
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# About Dunfermline

Dunfermline, located in Fife, Scotland, is a town rich in history and natural beauty. It is home to notable green spaces, including the famous Pittencrieff Park, often referred to as "The Glen," and Townhill Country Park. These parks serve as vital refuges for wildlife and recreational areas for residents.

Despite its vast green spaces, Dunfermline faces challenges related to biodiversity loss due to urban expansion. As more land is developed, many species that once thrived in the area are now in decline. One such species is the European hedgehog (*Erinaceus europaeus*), which has seen a dramatic decline in population across the UK due to habitat fragmentation, road accidents, and loss of food sources. The city has an opportunity to lead the way in urban biodiversity restoration by reintroducing hedgehogs and ensuring they have access to safe habitats and sufficient food sources.



# Synopsis

## Bringing Back Balance: Reintroducing Hedgehogs to Dunfermline

This project is designed to reintroduce and support hedgehogs in Dunfermline's parks and green spaces, mainly in Pittencrieff Park. The goal is to create a self-sustaining ecosystem where hedgehogs can thrive while benefiting both the environment and the community.

### **Key Objectives:**

- Restore hedgehog populations by providing suitable habitats and food sources.
- Enhance urban biodiversity, increasing species richness in Dunfermline's parks.
- Educate and engage the community, fostering a sense of responsibility toward local wildlife.
- Promote non-invasive, humane urban wildlife management strategies, ensuring peaceful coexistence between hedgehogs and humans.

This initiative aligns with Dunfermline's environmental policies and contributes to Scotland's broader efforts to promote biodiversity in urban spaces.

# Challenges and issues

## Why is This Project Necessary?

### 1. Decline of Hedgehog Populations

Urbanization has led to habitat fragmentation, making it difficult for hedgehogs to find shelter and food. Hedgehog populations in the UK have declined by 50% in rural areas and 30% in urban areas over the past two decades (British Hedgehog Preservation Society, 2021).

### 2. Increased Road Mortality

Hedgehogs often travel long distances at night in search of food. Roads and barriers such as walls and fences prevent them from moving freely, leading to:

- High rates of roadkill.
- Limited genetic diversity due to isolated populations.

### 3. Reduced Food Availability

Pesticide use and habitat loss have led to a decline in insects, slugs, and worms, which are primary food sources for hedgehogs. Without adequate food, survival rates decrease significantly.

# Challenges and issues

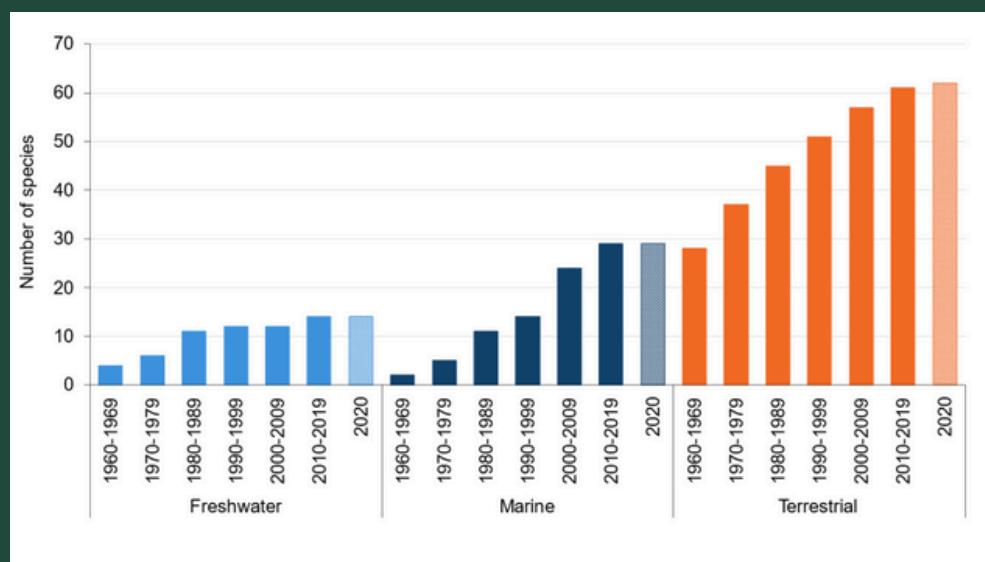
## 4. Proliferation of Invasive Species

With the decline of natural predators like hedgehogs, certain invasive species such as Spanish slugs (*Arion vulgaris*), wireworms (*Agriotes* spp.), and leatherjackets (*Tipulidae* larvae) have flourished. This has led to:

- Increased damage to gardens and crops.
- A growing reliance on chemical pesticides, which harm biodiversity.
- Disruptions in the local food chain, further impacting native species.

## 5. Public Awareness & Engagement

Many people are unaware of the challenges hedgehogs face and how they can help. Misconceptions about hedgehogs being pests also persist, leading to a lack of support for their conservation.



Number of invasive species in Great Britain since 1960

# Solutions

## Creating Wildlife-Friendly Zones

- Establish protected areas in parks where hedgehogs can find shelter and food.
- Introduce hedgerows, log piles, and nesting boxes to provide safe habitats.
- Promote wildlife-friendly gardening by encouraging residents and public spaces to grow insect-friendly plants and avoid pesticides.
- Work with local gardeners to create natural corridors between green spaces, allowing hedgehogs to move freely.



## Providing Safe Corridors for Hedgehogs

- Implement hedgehog highways, which are small holes in fences that allow them to travel between gardens and parks.
- Advocate for wildlife-friendly fencing and garden features to prevent isolation of hedgehog populations.
- Create safe crossing points with tunnels under roads to reduce road mortality.

# Solutions

## Public Awareness & Education

- Launch community workshops and school programs to educate residents about the importance of biodiversity.
- Install informational signage in parks explaining how to coexist with hedgehogs.
- Develop social media campaigns and citizen science projects to engage the public in monitoring urban wildlife.

## Reducing Threats to Hedgehogs

- Encourage reduced use of pesticides to increase insect populations.
- Promote responsible pet ownership to prevent domestic animals from harming hedgehogs.
- Encourage wildlife rescue and rehabilitation programs for injured hedgehogs.
- Reintroduce hedgehogs to regulate invasive species, reducing reliance on harmful chemical control methods.

# Expected benefits

## Ecological Balance & Healthier Ecosystems

- Hedgehogs help control insect populations, reducing damage to gardens and crops.
- Their presence encourages more diverse plant and insect life, contributing to a balanced ecosystem.
- By reducing invasive species like Spanish slugs, wireworms, and leatherjackets, hedgehogs help restore natural food chains in urban parks.

## Enhanced Public Spaces & Community Engagement

- Hedgehogs can bring an element of wildlife education and enjoyment to Dunfermline's parks. With their presence, people can develop a deeper appreciation for urban biodiversity.
- The reintroduction of hedgehogs offers an opportunity for citizen science initiatives, where residents can actively participate in monitoring hedgehog populations, track their movements, and contribute to wildlife data collection.
- Local schools and community groups can take part in hedgehog-focused educational programs, fostering a sense of environmental stewardship and community involvement.



# Expected benefits

## Reduced Need for Chemical Pest Control

A well-balanced ecosystem decreases reliance on pesticides, which harm non-target species and ecosystems. Less pesticide use leads to healthier soil, water sources, and overall environmental quality.

Hedgehogs are effective at controlling pests such as slugs, insects, and larvae. By naturally regulating the populations of these pests, particularly invasive species like Spanish slugs and leatherjackets, hedgehogs help to prevent damage to gardens and crops without the need for chemical pesticides. This natural pest control decreases the reliance on chemicals, which often disrupt local ecosystems.

## Climate Resilience & Sustainable Urban Planning

- By restoring hedgehog populations, Dunfermline's parks will become more resilient to climate change. Hedgehogs contribute to maintaining a healthy ecosystem, which can help mitigate issues like erosion and poor soil quality caused by unchecked insect populations.
- The project will help make Dunfermline a model of sustainable urban development, where biodiversity is protected and the city embraces the natural world in its planning and daily life.

# Stakeholders and implementation

## Who Will Be Involved?

- Dunfermline City Council → Providing policy support, funding, and infrastructure for hedgehog conservation efforts.
- Wildlife Conservation Organizations → Offering expertise on hedgehog health, monitoring, and reintroduction strategies, and conducting research on the impacts of the project.
- Local Schools & Universities → Engaging in educational outreach, research, and community involvement programs focused on hedgehog conservation.
- Community Groups & Volunteers → Creating and maintaining hedgehog-friendly spaces, helping with monitoring, and participating in citizen science initiatives.
- Urban Planners & Ecologists → Designing wildlife corridors and green spaces that support hedgehog populations and contribute to overall biodiversity goals.



# Conclusion

## Dunfermline: A Leader in Urban Wildlife Restoration

The reintroduction of hedgehogs to Dunfermline's parks is an essential step toward restoring the town's biodiversity and ecological balance. Hedgehogs, as natural pest controllers and contributors to healthy ecosystems, will help reduce the reliance on harmful pesticides, promote sustainable urban planning, and restore a natural food web in urban green spaces.

By prioritizing hedgehogs, Dunfermline can not only rejuvenate its local environment but also set an example for other cities aiming to bring wildlife back to urban areas. This project offers an opportunity to blend conservation efforts with community engagement, creating a harmonious coexistence between urban life and nature.

Join us in making Dunfermline a thriving, hedgehog-friendly city! Let's work together to restore balance to our urban ecosystems and ensure a healthier future for all living creatures.