## **Zooniverse Project**

By Fathima Ruhi Amisa

# **SILVASCOPE**

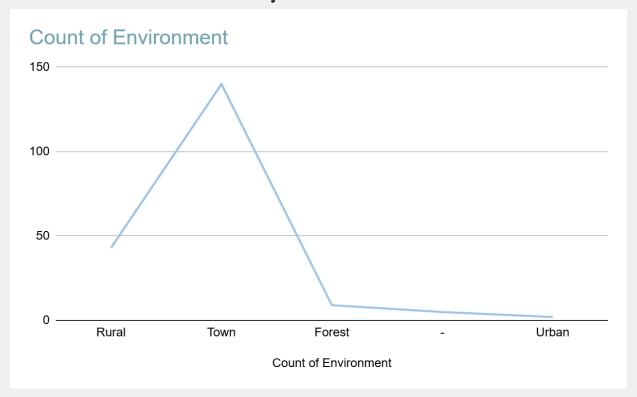
A closer look at the city forests through panoramic lenses

This project analyzed camera trap images to identify the location of trees and their species. Volunteers classify images and contribute to surban health and climate recilence. Findings from this project will provide valuable insights to help researchers train a computer vision model that will one day in future identify trees on its own at scale, and in real time. These models can support scientists, urban ecologists, and city planners to make healthier cities. Observations have been recorded on 200 images in this project.

#### **Methods:**

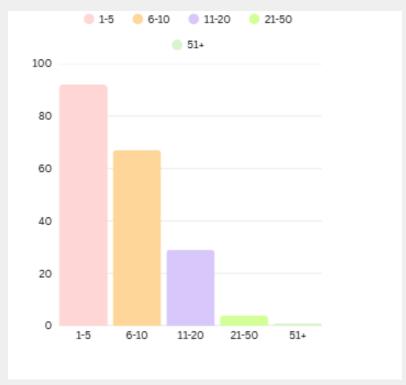
Observations were logged in Google Sheets, tracking tree counts, condition categories, environment, and confusing instances. Charts summarized patterns across all images.

Table 1. Distribution of Trees by Environment



All images in this project were taken from Irish cities, and the trees mostly appeared within town-like settings rather than dense urban cores or rural areas. This dataset reflects tree populations in towns and provides insight for AI classification in moderately built environments.

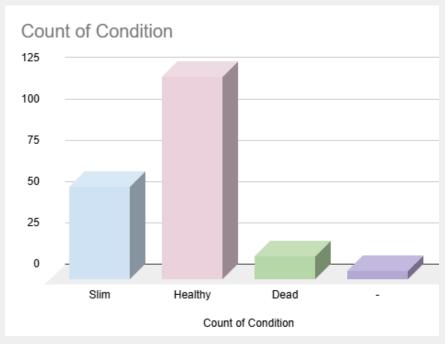
Table 2. Number of Trees observed.



This dataset showcases the most common number of trees in images captured from those cities verified between 1-5.

Table 3. Distribution of Tree Categories observed.

( - was used for images that had no trees.)

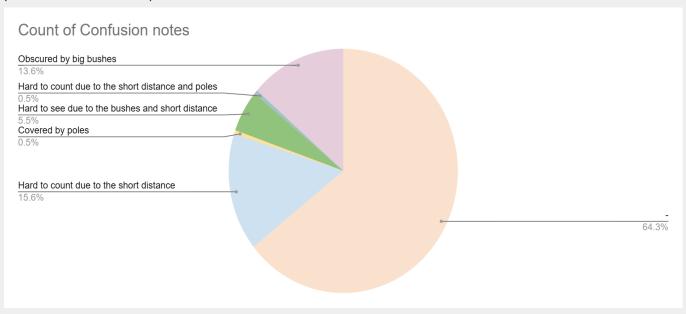


### **Exact Distribution of Tree condition:**

Tree condition	Count
Slim	56
Dead	14
Healthy	123

Table 4. Table of reasons behind Confusion

(- means no confusion)



Images with higher tree density or large bushes often had more confusion for classification.

#### **Conclusion:**

This project aimed to assist AI in distinguishing trees from other objects in images. Over the course of the study, 200 images were carefully analyzed, with observations recorded in Google Sheets. Each image was categorized by tree count, condition (Slim, Healthy, Dead), and environment (Urban, Forest, Rural, Town). Patterns in tree distribution and environmental context were noted, and charts were created to visually represent these findings. This structured dataset contributes meaningful insights for AI training and demonstrates the effectiveness of methodical observation in citizen science projects.