

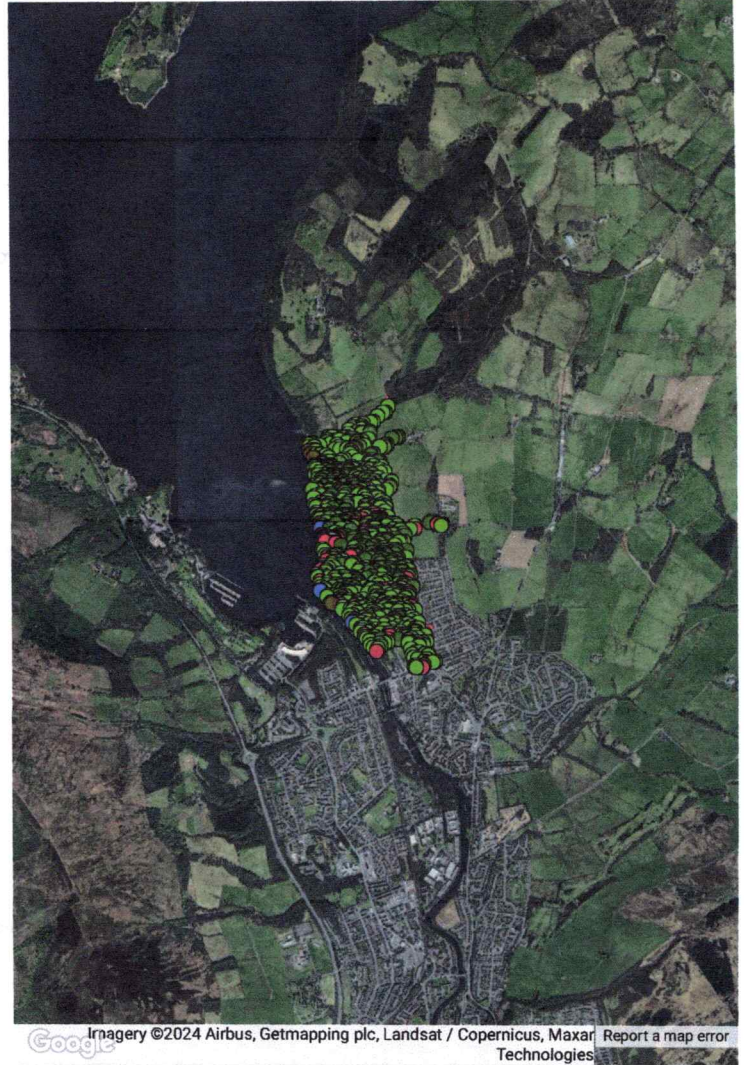
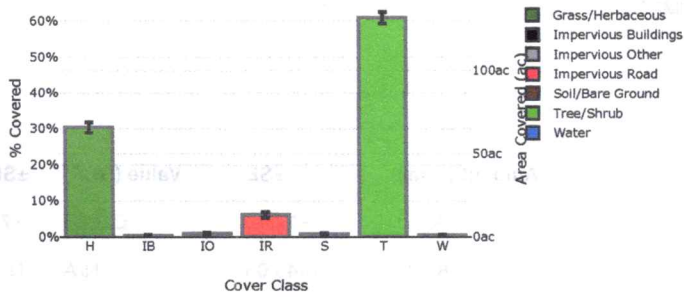
i-Tree Canopy

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 12/3/2024



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		304	30.40 ± 1.45	65.80 ± 3.15
IB	Impervious Buildings		4	0.40 ± 0.20	0.87 ± 0.43
IO	Impervious Other		9	0.90 ± 0.30	1.95 ± 0.65
IR	Impervious Road		61	6.10 ± 0.76	13.20 ± 1.64
S	Soil/Bare Ground		8	0.80 ± 0.28	1.73 ± 0.61
T	Tree/Shrub		609	60.90 ± 1.54	131.81 ± 3.34
W	Water		5	0.50 ± 0.22	1.08 ± 0.48
Total			1000	100.00	216.44

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO ₂ Equiv. (T)	±SE	Value (GBP)	±SE
Sequestered annually in trees	179.93	±4.56	659.74	±16.72	£41,297	±1,046
Stored in trees (Note: this benefit is not an annual rate)	4,518.72	±114.50	16,568.63	±419.82	£1,037,126	±26,279

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 1.365 T of Carbon, or 5.005 T of CO₂, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO₂, per ac

and rounded. Value (GBP) is based on £229.52/T of Carbon, or £62.60/T of CO₂ and rounded. (English units: T = tons (2,000 pounds), ac = acres)

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (GBP)	±SE
CO	Carbon Monoxide removed annually	77.95	±1.98	£42	±1
NO2	Nitrogen Dioxide removed annually	1,593.35	±40.37	£93	±2
O3	Ozone removed annually	5,329.82	±135.05	£1,794	±45
SO2	Sulfur Dioxide removed annually	212.78	±5.39	£5	±0
PM2.5	Particulate Matter less than 2.5 microns removed annually	641.58	±16.26	£6,963	±176
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	1,013.80	±25.69	£19,078	±483
Total		8,869.29	±224.73	£27,974	±709

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in lb/ac/yr @ £/lb/yr and rounded:

CO 0.591 @ £0.53 | NO2 12.088 @ £0.06 | O3 40.435 @ £0.34 | SO2 1.614 @ £0.02 | PM2.5 4.867 @ £10.85 | PM10* 7.691 @ £18.82 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Kgal)	±SE	Value (GBP)	±SE
AVRO	Avoided Runoff	480.45	±12.17	£2,819	±71
E	Evaporation	17,485.85	±443.06	N/A	N/A
I	Interception	17,571.50	±445.23	N/A	N/A
T	Transpiration	56,087.04	±1,421.16	N/A	N/A
PE	Potential Evaporation	49,433.65	±1,252.57	N/A	N/A
PET	Potential Evapotranspiration	38,430.27	±973.76	N/A	N/A

Currency is in GBP and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in Kgal/ac/yr @ £/Kgal/yr and rounded:

AVRO 3.645 @ £5.87 | E 132.656 @ N/A | I 133.306 @ N/A | T 425.503 @ N/A | PE 375.027 @ N/A | PET 291.550 @ N/A (English units: Kgal = thousands of gallons, ac = acres)

About i-Tree Canopy

The concept and prototype of this program were developed by David J. Nowak, Jeffery T. Walton, and Eric J. Greenfield (USDA Forest Service). The current version of this program was developed and adapted to i-Tree by David Ellingsworth, Mike Binkley, and Scott Maco (The Davey Tree Expert Company)

Limitations of i-Tree Canopy

The accuracy of the analysis depends upon the ability of the user to correctly classify each point into its correct class. As the number of points increase, the precision of the estimate will increase as the standard error of the estimate will decrease. If too few points are classified, the standard error will be too high to have any real certainty of the estimate.

Since 2006, i-Tree has been a cooperative, public/private partnership between:

