



TIM MOYA ASSOCIATES



i-Tree is a state-of-the-art, recognised software suite from the USDA Forest Service that provides urban and rural forestry analysis and benefits assessment tools.

i-Tree Eco

A flexible software application designed to use data collected in the field from complete inventories along with local hourly air pollution and meteorological data to quantify forest structure, environmental effects, and value to communities.

What does iTree provide?

- i-Tree to report on individual trees, parcels, neighborhoods, cities.

Structural and compositional analyses

- Species condition and distribution
- Leaf area and biomass
- Species importance values
- Diversity indices and relative performance
- CAVAT value

Forecasting modeling options including

- Tree planting inputs
- Extreme event impacts for weather and pests
- Annual mortality adjustments

Functional Analyses

- Pollution removal and human health impacts
- Carbon sequestration and storage
- Hydrology effects (avoided run-off, interception, transpiration)
- Building energy effects
- Tree bioemissions
- Ultraviolet radiation (UV) tree effects



Wildlife Suitability by Stratum

Location: Grand Rapids, Kent, Michigan, United States of America
Project: Grand Rapids, Series: Grand Rapids, Year: 2011
Generated: 12/13/2018

Stratum	Wildlife Name	Suitability Index		Index Change Due to Trees	
		With Trees	Without Trees	Relative (%)	Absolute
Commercial	<i>Cardinalis cardinalis</i>	0.191	0.174	8.771	0.017
	<i>Hylocichla mustelina</i>	0.006	0.000	94.134	0.005
	<i>Icterus galbula</i>	0.266	0.052	80.646	0.215
	<i>Melanerpes carolinus</i>	0.136	0.020	85.385	0.116
	<i>Piranga olivacea</i>	0.002	0.000	77.439	0.001
	<i>Poecile atricapillus</i>	0.156	0.062	59.918	0.093
Government	<i>Sturnus vulgaris</i>	0.326	0.246	24.437	0.080
	<i>Turdus migratorius</i>	0.527	0.492	6.591	0.035
	<i>Cardinalis cardinalis</i>	0.217	0.213	1.675	0.004
	<i>Hylocichla mustelina</i>	0.070	0.000	99.517	0.069
	<i>Icterus galbula</i>	0.206	0.052	74.998	0.155
	<i>Melanerpes carolinus</i>	0.203	0.020	90.205	0.183
Industrial	<i>Piranga olivacea</i>	0.016	0.000	97.844	0.016
	<i>Poecile atricapillus</i>	0.193	0.062	67.712	0.131
	<i>Sturnus vulgaris</i>	0.268	0.261	2.601	0.007
	<i>Turdus migratorius</i>	0.587	0.600	-2.191	-0.013
	<i>Cardinalis cardinalis</i>	0.193	0.175	9.031	0.017
	<i>Hylocichla mustelina</i>	0.003	0.000	87.942	0.002
Residential	<i>Icterus galbula</i>	0.246	0.052	79.029	0.194
	<i>Melanerpes carolinus</i>	0.163	0.020	87.768	0.143
	<i>Piranga olivacea</i>	0.003	0.000	86.612	0.002
	<i>Poecile atricapillus</i>	0.150	0.062	58.384	0.087
	<i>Sturnus vulgaris</i>	0.111	0.141	-26.931	-0.030
	<i>Turdus migratorius</i>	0.462	0.432	6.494	0.030

This is an example report exported from an i-Tree Eco project for Grand Rapids, MI with explanatory help text added.



UV Effects of Trees by Stratum

Location: Grand Rapids, Kent, Michigan, United States of America
Project: Grand Rapids, Series: Grand Rapids, Year: 2011
Generated: 12/13/2018

Stratum	UV Effects in Tree Shade			UV Effects Overall		
	Protection Factor	Reduction in UV Index	Percent reduction (%)	Protection Factor	Reduction in UV Index	Percent reduction (%)
Commercial	1.788	1.668	34.97	1.123	0.417	10.21
Government	2.169	1.929	45.63	1.387	0.932	27.28
Industrial	1.766	1.650	34.37	1.108	0.384	9.40
Other	2.457	2.076	52.48	1.590	1.212	36.54
Residential	2.641	2.154	56.05	1.722	1.358	41.37
Study Area	2.343	2.023	49.98	1.510	1.110	33.16