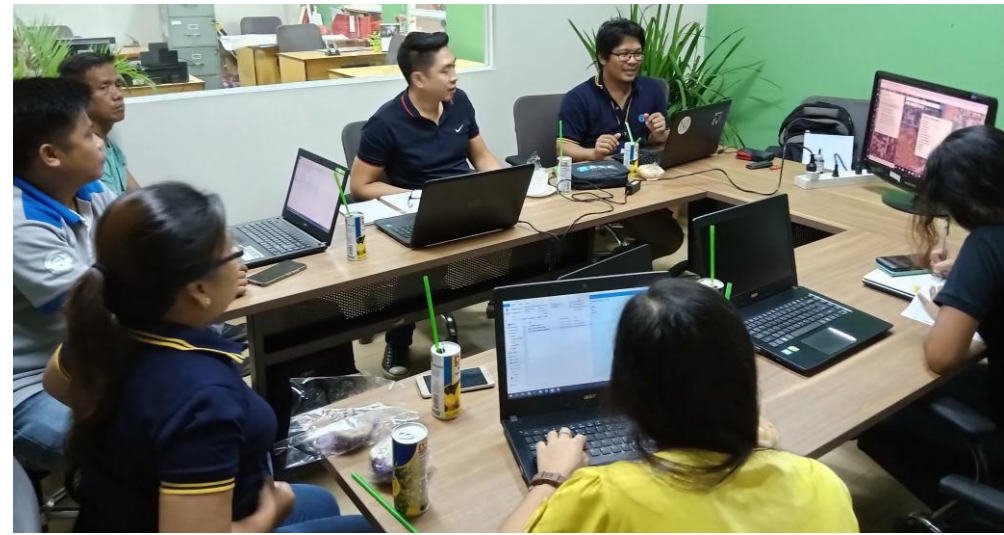
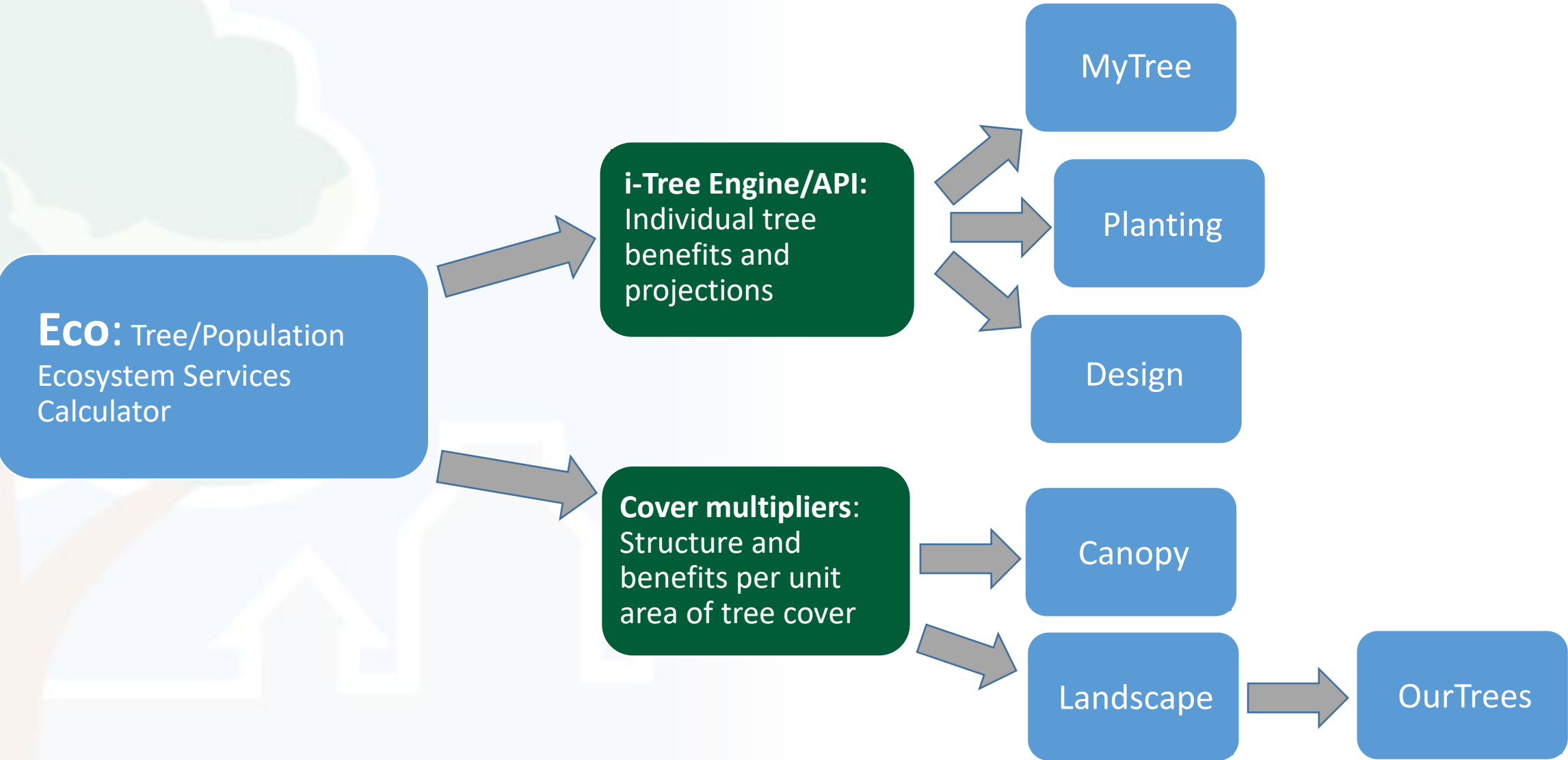


Plan for today

1. Setting up your first project
2. Key decisions
3. i-Tree Eco Results
4. Is i-Tree Eco right for you?



i-Tree Tool Relationships



i-Tree is a
Cooperative
Initiative
among these
partners



The i-Tree Eco Framework



Structure



Function



Value

- Summary of field measurements
- Leaf area
- Condition
- Species distribution
- Diameter distribution

- Air quality improvement
- Energy effects
- Carbon storage & sequestration
- Hydrology effects
- Shade ultraviolet effects (UV)
- Foodscape characteristics
- Wildlife suitability – avian focus
- Volatile organic compounds
- Leaf nutrients, wood production, and more

- Monetary value
- Equivalent values
- Health outcomes
- Cost Benefit analysis
- Summaries for management

Key Decision 1: What data will you collect?

Minimum Required Tree Data

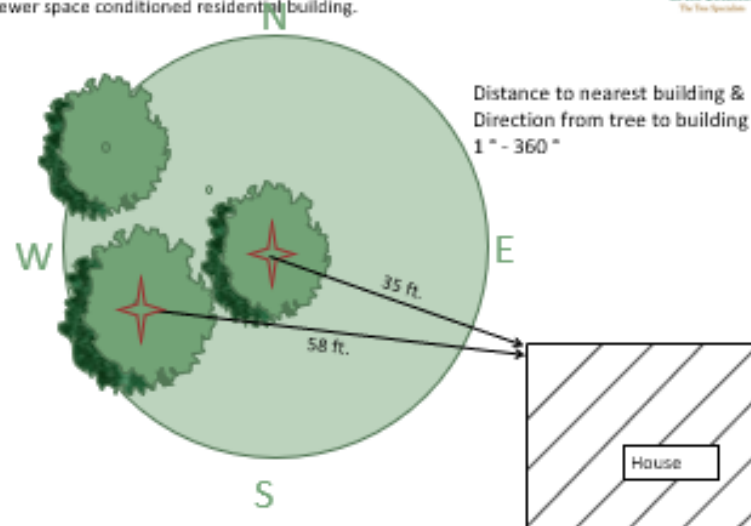
1. Tree species
2. Diameter at breast height (DBH)

Optional but Recommended Tree Data

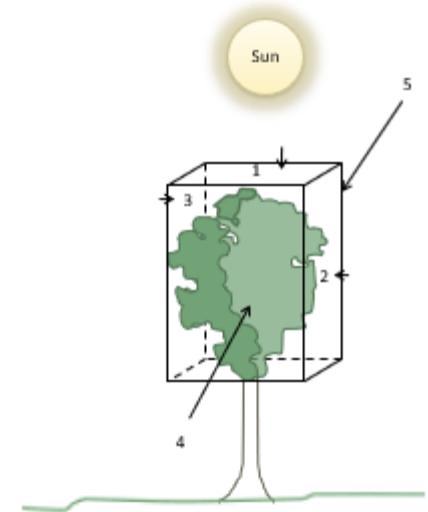
3. Total tree height
4. Height to live top
5. Height to crown base
6. Crown width (N-S)
7. Crown width (E-W)
8. % Crown missing
9. % dieback (condition)
10. Crown light exposure (CLE)
11. Land use

Energy Effect (optional)

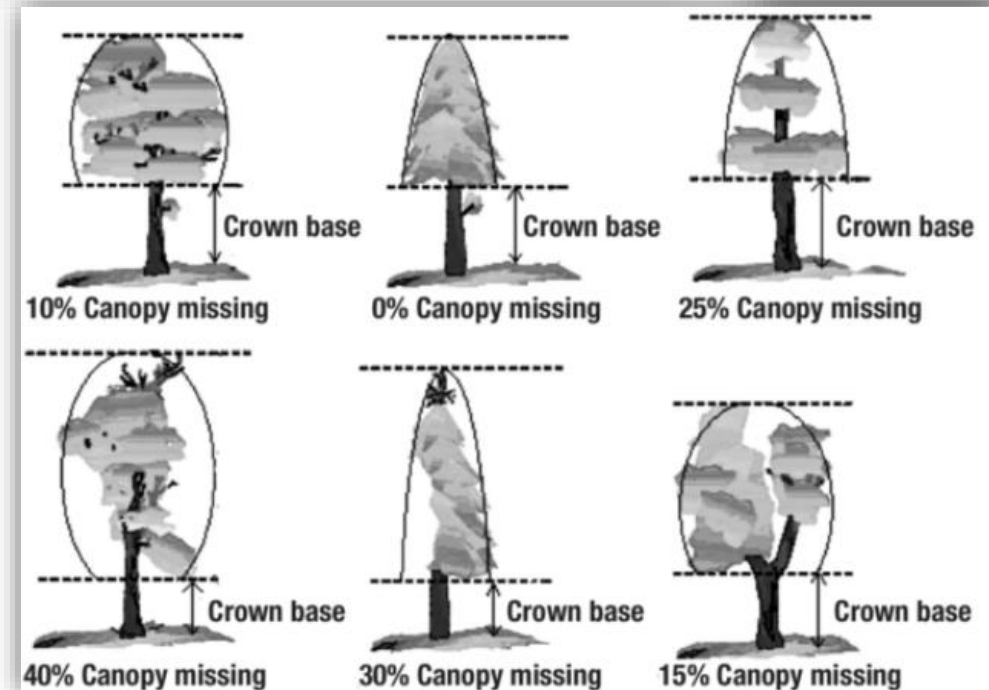
Collect for trees $\geq 20\text{ft}$ (6.1m) tall and within 60ft (18.3m) of a 3 story or fewer space conditioned residential building.



CROWN LIGHT EXPOSURE



CLE affects tree growth rates and accounts for competition with other trees for access to light.



From field data to results



Northern Research Station | General Technical Report NRS-200-2021 | December 2021

Understanding i-Tree: 2021 Summary of Programs and Methods

David J. Nowak



Page 22

<https://www.fs.usda.gov/research/treearch/63636>

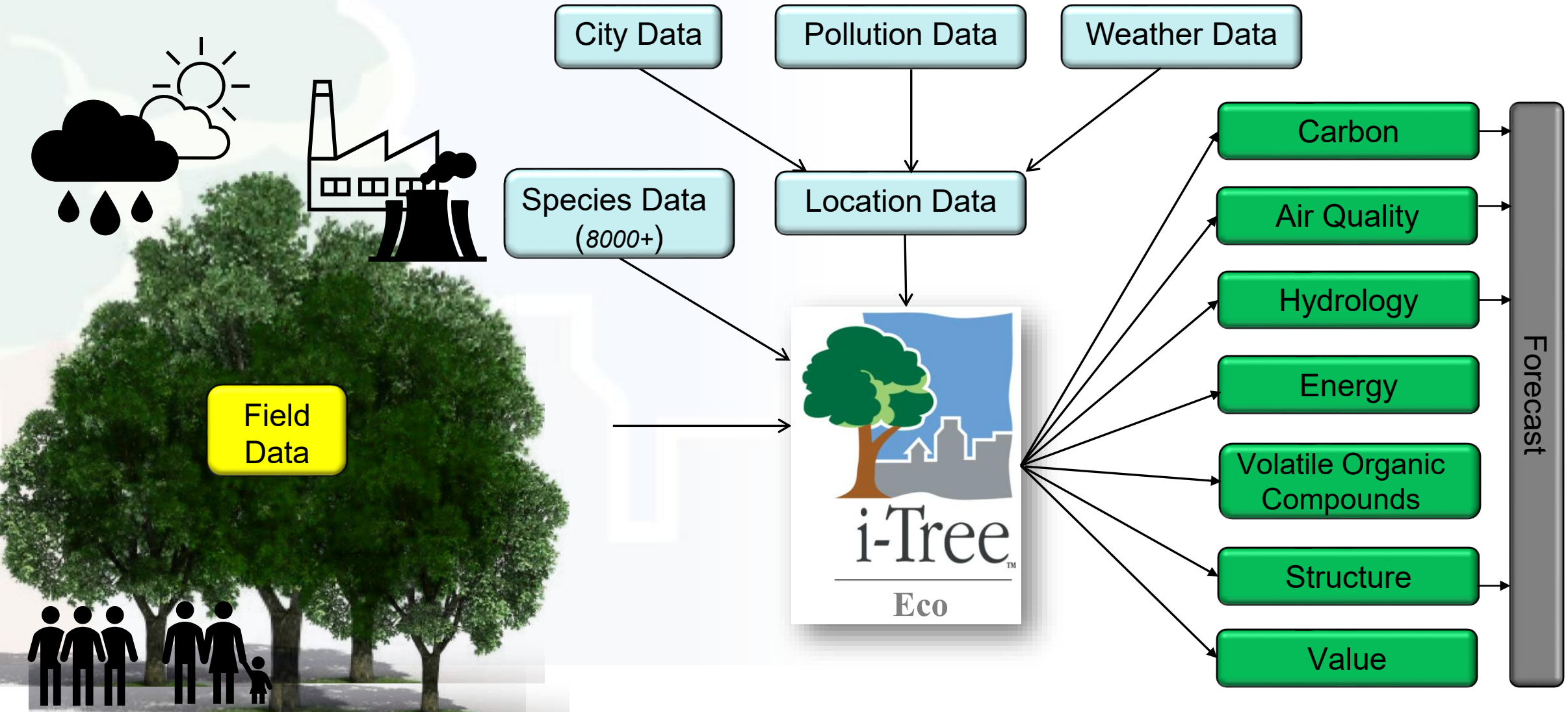
Table 2.—Summary of which directly field-measured characteristics are used to estimate derived variables and ecosystem services. D= directly used; I= indirectly used; C= conditionally used.

	DERIVED VARIABLES		ECOSYSTEM SERVICES										
	Leaf Area	Leaf Biomass	Carbon Storage	Gross Carbon Sequestration	Net Carbon Sequestration	Energy Effects	Air Pollution Removal	Avoided Runoff	Transpiration	VOC Emissions	Compensatory Value	Wildlife Suitability	UV Effects
DIRECT MEASURES													
Species	D	D	D	D	D	D	I	I	I	D	D		
Diameter at breast height (d.b.h.)			D	D	D						D	D	
Total height	D	D	C	C	C	D	I	I	I	I		D	
Crown base height	D	D	C				I	I	I	I			
Crown width	D	D	C				I	I	I	I			
Crown light exposure			C	D	D								
Percent crown missing	D	D	C	C	C	D	I	I	I	I			
Crown health (condition/dieback)				D	D						D	D	
Field land use				D							D	D	
Distance to building						D							
Direction to building						D							
Percent tree cover						D	D	D				D	D
Percent shrub cover							D					D	
Percent building cover						D							
Ground cover composition							I					D	

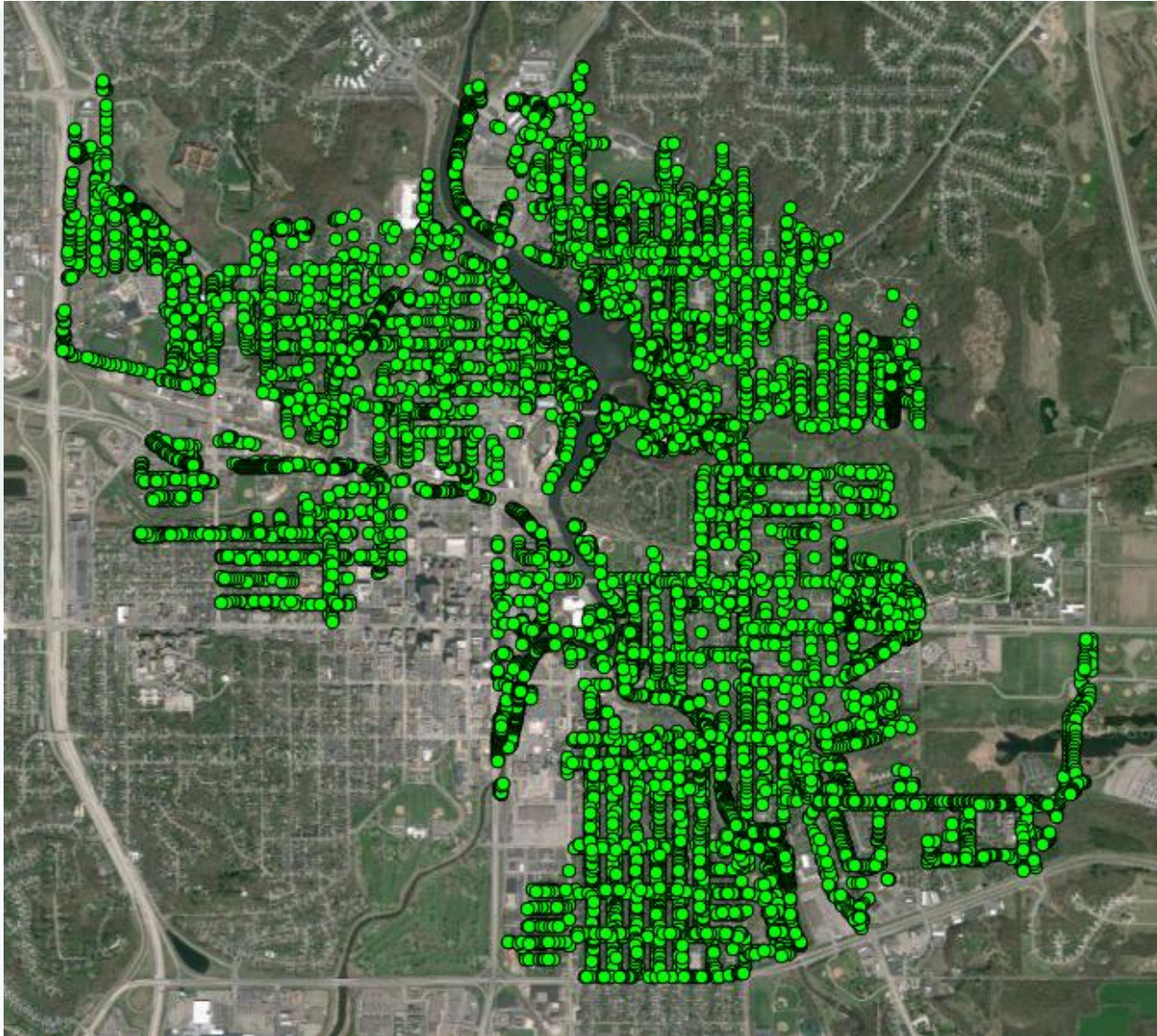
Tree Data

Plot Data

i-Tree model basics: Inventory data → tree benefits?



Let's set-up an i-Tree Eco project



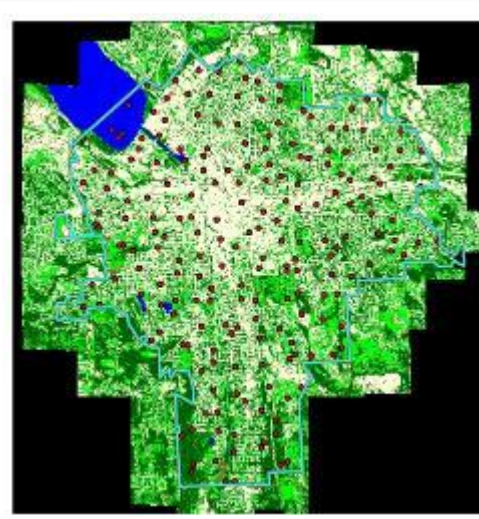
Rochester, MN
Street Tree Inventory

Key Decision 2: Sample or complete inventory?



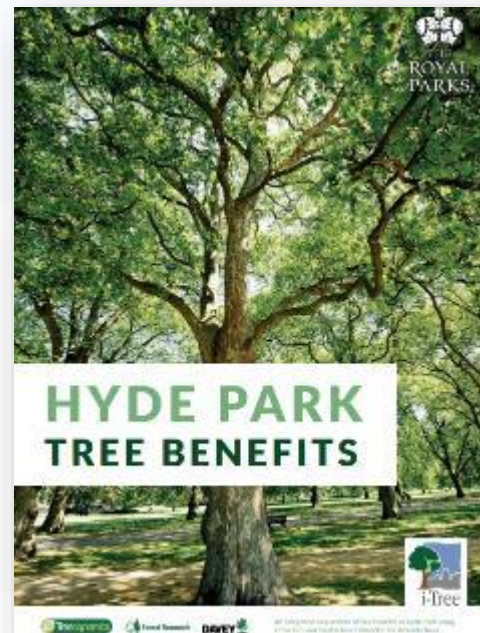
Random sample of plots

- City
- County
- Regional or watershed
- Large scale or forested areas



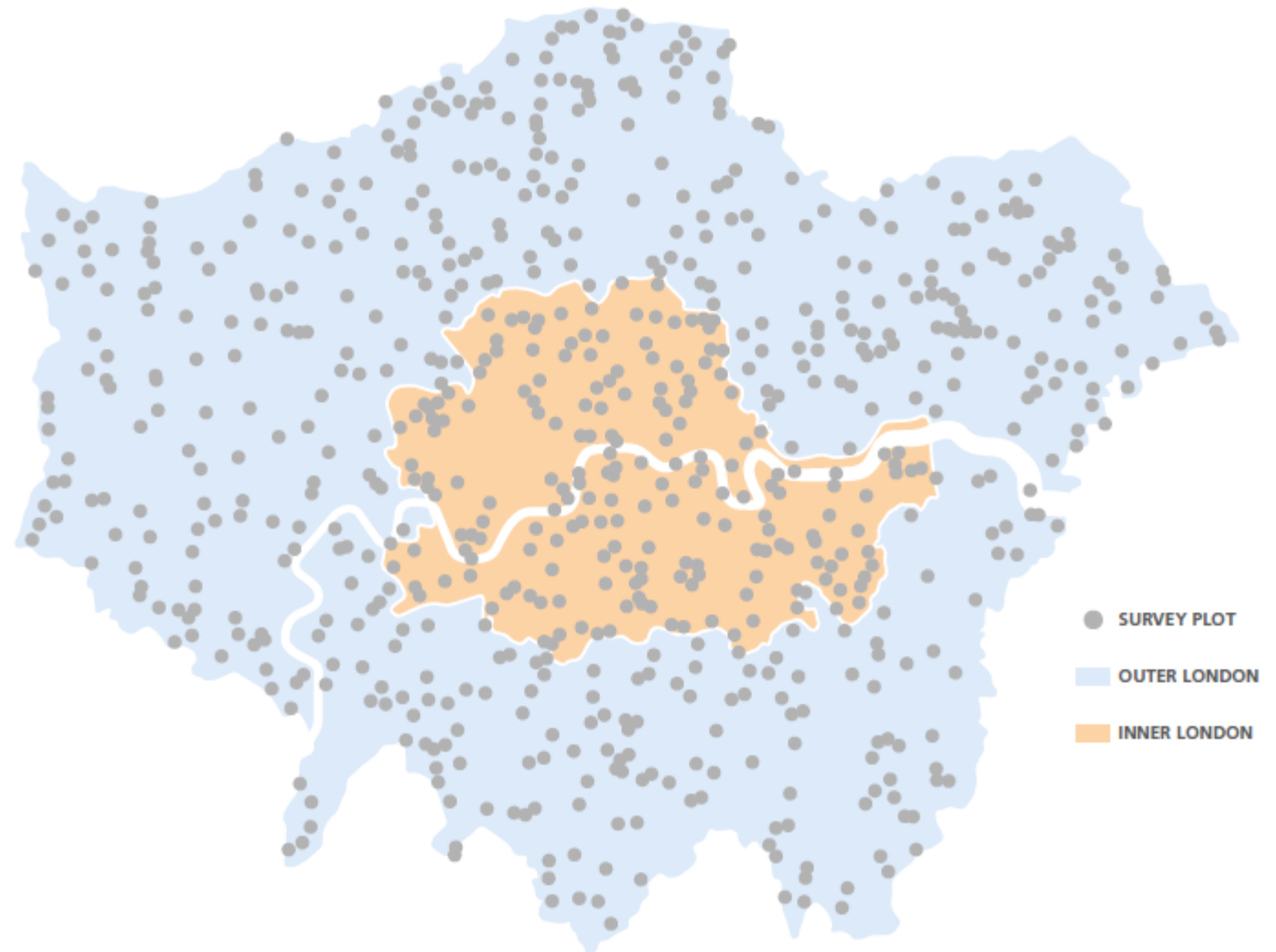
Complete inventory

- Parks
- Campuses
- Residential properties
- Specimen or single trees
- Only trees of interest



What is a sample and why would you do it?

- A small subset of the items you are interested in
- Easier than measuring the whole thing
- For statistical reasons must be random
- We can estimate how well our sample represents the whole population
- This is how London measures 8.5 million trees



What is a plot?

- By default 37.2 ft in radius, 1/10th acre in area.
- Plot size can be changed
- Tradeoffs between plot size and the number you can measure



Sample Plots vs. Complete Inventory

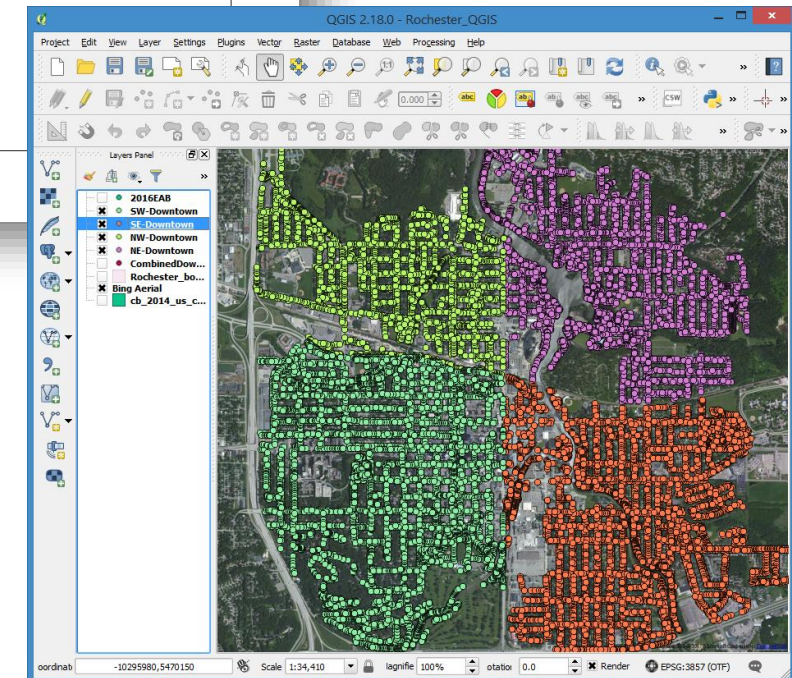
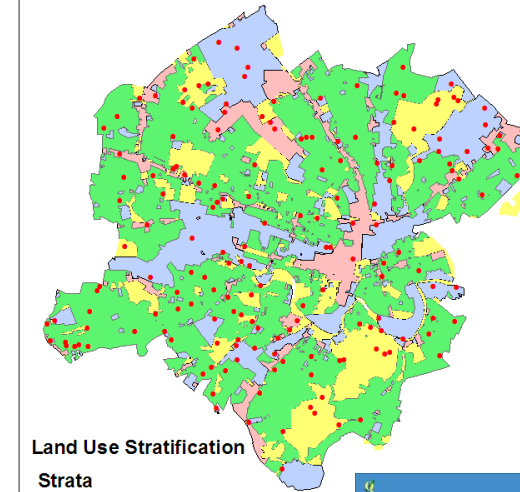


Characteristic	Sample	Complete
Recommended area	City or larger	Any
Number of plots	200 or more	not applicable
Typical number of trees	>500	Any
Access	Numerous permissions usually required	Often no permission required
Accuracy	Some loss of accuracy due to sampling error	No sampling error, all trees of interest measured
Results	Estimates expanded to whole area of interest	Estimates only for measured trees

Key Decision 3: Will you stratify?

Dividing area of interest into categories

- Can be performed by any categories of interest (land use, ownership, political, watershed, etc.)
- Summaries generated by categories of interest
- Perform pre- or post- measurement (sample must be random)
- Can improve statistical accuracy
- Plots or complete inventory





Key Decision 4: How will you enter data? manual, mobile, or import

i-Tree Eco v6 sample plot data sheet

Sheet _____ of _____

☐ Check when plot is completed
Initials: _____

Plot Information

Plot ID:	Strata:	GPS Coordinates	Date:	Crew:	Plot Size:
		Lat.			
		Long.			

Plot Address: _____

Plot Contact Name: _____ Contact Type or Title: _____

Phone #: _____ Email: _____

Plot or Access Notes: _____

Plot Tree Cover (%)	Shrub Cover (%)	Plantable Space (%)	Percent of Plot Measured (%)

Did this Plot have any Trees? (Y/N): _____ Permanent stake used? (Y/N): _____

Photo ID(s): _____



[Project: Adrian] [Series: Adrian_2012] [Year: 2012] - i-Tree Eco v6.0.4

File Project Configuration Data View Reports Forecast Support

Paper Form Submit to Mobile Retrieve from Mobile Plots Trees Shrubs Check Data CSV KML Benefit Annual Prices Costs Editing Mode: Off

Data Collection Inventory Data Export Inventory Value

Help

Data > Inventory Data > Plots

The **Plots** function seen in the action panel to the right is where you can enter or edit the plot data that you collected in the field (see Notes below). The upper table displays your plot data. While working in this table, you may use the tools in the **Actions** group to help manually enter new data or edit data that has already been added.

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Steps to Manually Add/Edit Data:

1. Click in the box where you would like to enter data and begin typing.
2. Use the Tab key on your keyboard or the left and right arrows to move from

ID	Eude (Y)	Longitude (X)	Date	Crew	Contact Info	Size (i)	Photo ID	Stake	% Tree	% Shrub	% P
1	8656011	-84.0385827151	4/24/2...	Team 2	fda fdsa fgr	0.10			10% - 15%	1% - 5%	30% -
2	38815014	-83.9977850608	4/18/2...	Team 1		0.10			1% - 5%	65% - 70%	10% -
3	15508679	-84.0575169972	4/25/2...	Team 2		0.10			1% - 5%	10% - 15%	30% -
4	4037655	-84.0336271443	4/23/2...	Team 1		0.10			1% - 5%	1% - 5%	0%
5	78022666	-84.0433420921	4/24/2...	Team 1		0.10			0%	5% - 10%	0%
6	797495	-84.0694443259	4/19/2...	Team 1		0.10			0%	0%	30% -
7	10326133	-84.0622901734	4/19/2...	Team 2		0.10			45% - 50%	1% - 5%	5% - 1
8	08126706	-84.0363356381	4/24/2...	Team 1		0.10			15% - 20%	0%	15% -
9	96562689	-84.069754892	4/19/2...	Team 2		0.10			0%	0%	100%
10	1926253	-84.0396421345	4/24/2...	Team 1		0.10			0%	0%	0%
11	72822179	-84.0192241756	4/27/2...	Team 2		0.10			95% - 99%	1% - 5%	0%

Trees

ID	Survey Date	Status	Distance (ft)	Direction	Species	Land Use
1	4/27/2012	Ingrowth	11.80	338	Shelbark hickory (Carya laciniosa)	Vacant
2	4/27/2012	Ingrowth	19.20	338	Black cherry (Prunus serotina)	Vacant
3	4/27/2012	Ingrowth	34.60	352	American elm (Ulmus americana)	Vacant
4	4/27/2012	Ingrowth	10.00	0	American elm (Ulmus americana)	Vacant
5	4/27/2012	Ingrowth	17.70	10	Black cherry (Prunus serotina)	Vacant
6	4/27/2012	Ingrowth	35.20	20	Silver maple (Acer saccharinum)	Vacant

Manual data entry:
Collect on paper then directly enter in the
i-Tree Eco interface

Data entry: mobile



Web-enabled mobile device

1. Measure and enter your selected field variables
2. Regularly submit data to Davey servers
3. Retrieve data into your i-Tree Eco Project



Data import



AutoSave	Off	»	Roc...	Henning, Jason	HJ	Clipboard	Font	Alignment	Number	Conditional Formatting	Format as Table	Cell Styles	Cells	Editing	Analyze Data	Sens
B9 Maackia																
1	Zone	Species	Scientific Name	DBH	CONDITION											
2	NE	Hackberry	Celtis occidentalis	22	Poor											
3	NE	MapleNorway	Acer platinoides	15	Good											
4	NW	Honeylocust	Gleditsia triacanthos	24	Good											
5	NW	Crabapplespp	Malus	4	Good											
6	SE	Redbud, Eastern	cercis canadensis	3	Poor											
7	SE	Pinespp.	Pinus	15	Poor											
8	SE	LindenOrnamental	Tilia cordata	18	Good											
9	SE	Maackia	Amur maackii	4	Dead											
10	SE	MapleNorway	Acer platinoides	6	Poor											
11	SE	Redbud, Eastern	cercis canadensis	3	Poor											
12	SE	Honeylocust	Gleditsia triacanthos	17	Fair											
13	NW	Hawthorn spp.	crataegus	2	Good											
14	SE	Crabapplespp	Malus	6	Dying											
15	SE	Redbud, Eastern	cercis canadensis	3	Fair											
16	NW	AshGreen	Fraxinus Pennsylvanica	19	Good											
17	NE	AshGreen	Fraxinus Pennsylvanica	18	Good											
18	NW	MapleSugar	Acer sachrum	28	Dying											
19	NW	MapleNorway	Acer platinoides	9	Good											
20	NW	MapleSilver	Acer sacharinum	35	Excellent											
21	SE	Ulmus americana 'princeton'	Ulmus americana 'princeton'	7	Good											
22	SE	MapleSilver	Acer sacharinum	38	Good											
23	NW	Crabapplespp	Malus	7	Dying											
24	NE	MapleNorway	Acer platinoides	19	Good											
25	SW	Crabapplespp	Malus	8	Good											
26	SE	LindenOrnamental	Tilia cordata	15	Good											
27	NE	Ginkgo	Ginkgo biloba	2	Fair											
28	SE	Honeylocust	Gleditsia triacanthos	5	Poor											
29	SE	MapleNorway	Acer platinoides	17	Fair											
30	NE	Hackberry	Celtis occidentalis	2	Fair											



[Project: Adrian] [Series: Adrian_2012] [Year: 2012] - i-Tree Eco v6.0.4

File Project Configuration Data View Reports Forecast Support

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4	4037655	-84.0336271443	4/23/2...	Team 1		0.10			1% - 5%	1% - 5%	0%
5	78022666	-84.0433420921	4/24/2...	Team 1		0.10			0%	5% - 10%	0%
6	797495	-84.0694443259	4/19/2...	Team 1		0.10			0%	0%	30% -
7	10326133	-84.0622901734	4/19/2...	Team 2		0.10			45% - 50%	1% - 5%	5% - 1
8	08126706	-84.0363356381	4/24/2...	Team 1		0.10			15% - 20%	0%	15% -
9	96562689	-84.069754892	4/19/2...	Team 2		0.10			0%	0%	100%
10	1926253	-84.0396421345	4/24/2...	Team 1		0.10			0%	0%	0%

Trees

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Data entry: mobile, manual, or import



Mobile

- Useful for citizen science
- Multiple people can do data entry
- Need device, safety, battery
- Tedious for plots with lots of trees

Manual

- Use paper for permanent record
- Fewer potential issues
- Single user
- Slow

Import

- Ultimate flexibility
- Add value to existing inventories
- Quick
- Now works for samples or complete inventory

Let's get some data into i-Tree Eco

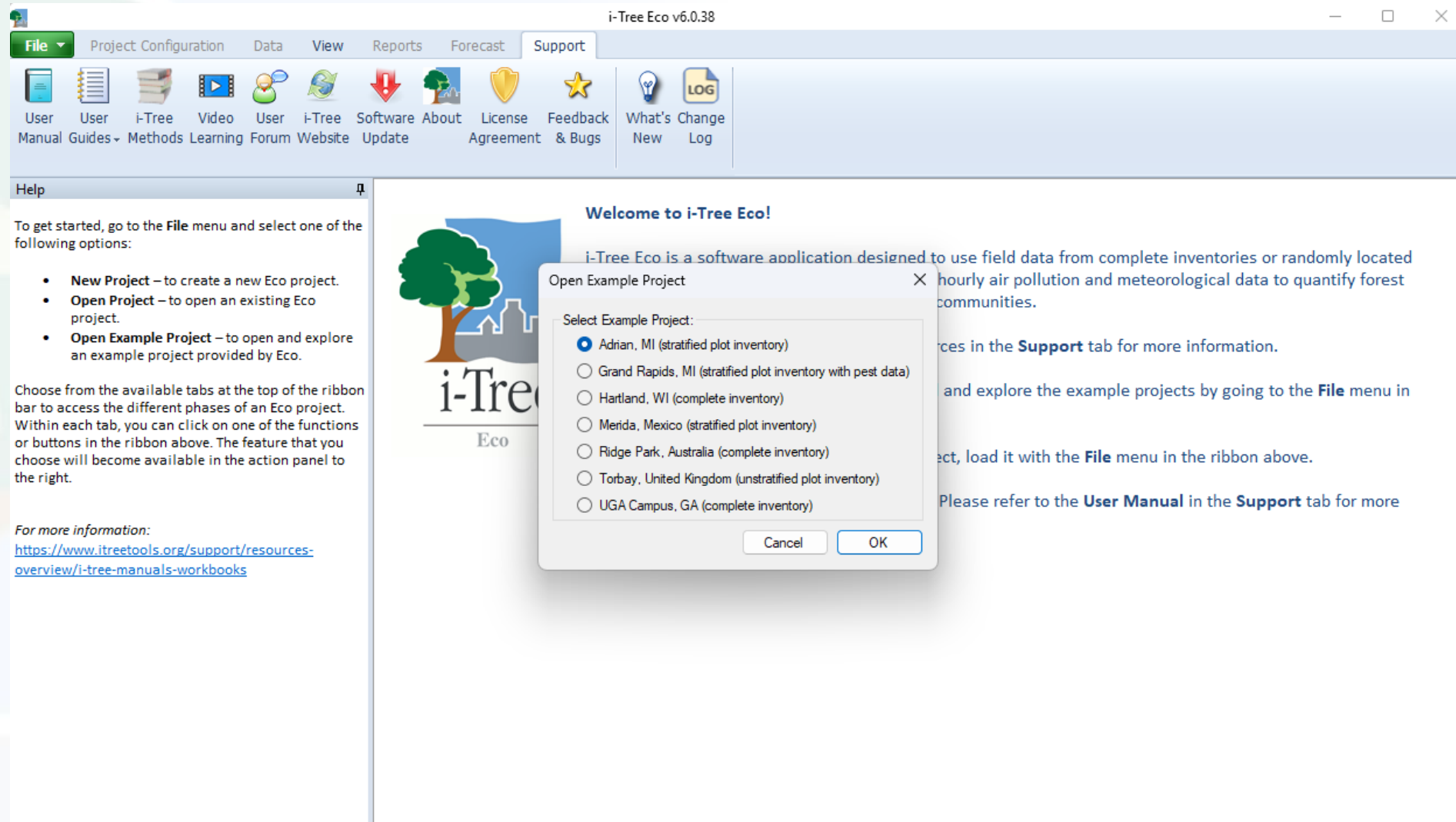


Mobile data entry



<https://bit.ly/i-TreeAcademy>

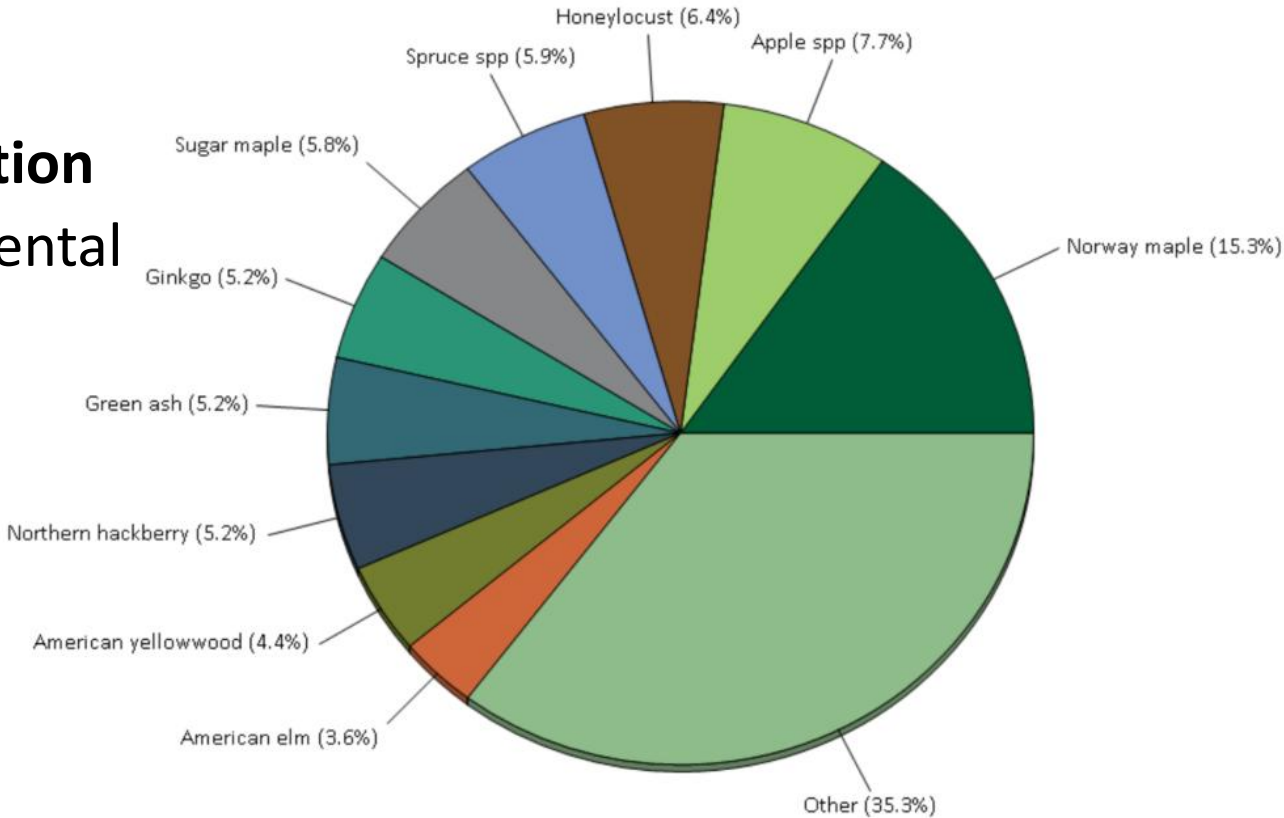
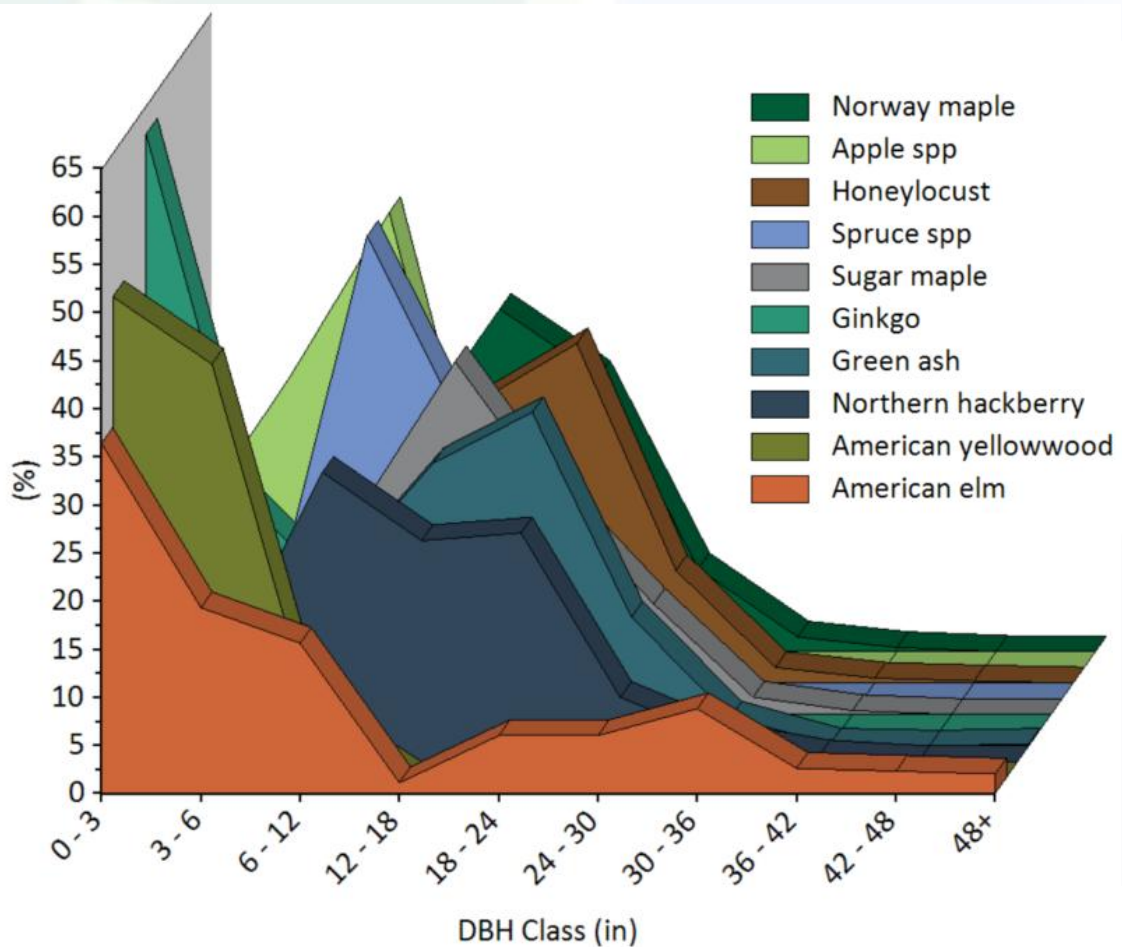
Explore i-Tree Eco with Example Projects



i-Tree Eco structure results

Species Diversity/Composition

Diversity reduces environmental threats, increases resilience



Size/Age Class Distribution

Distribution of age informs sustainability

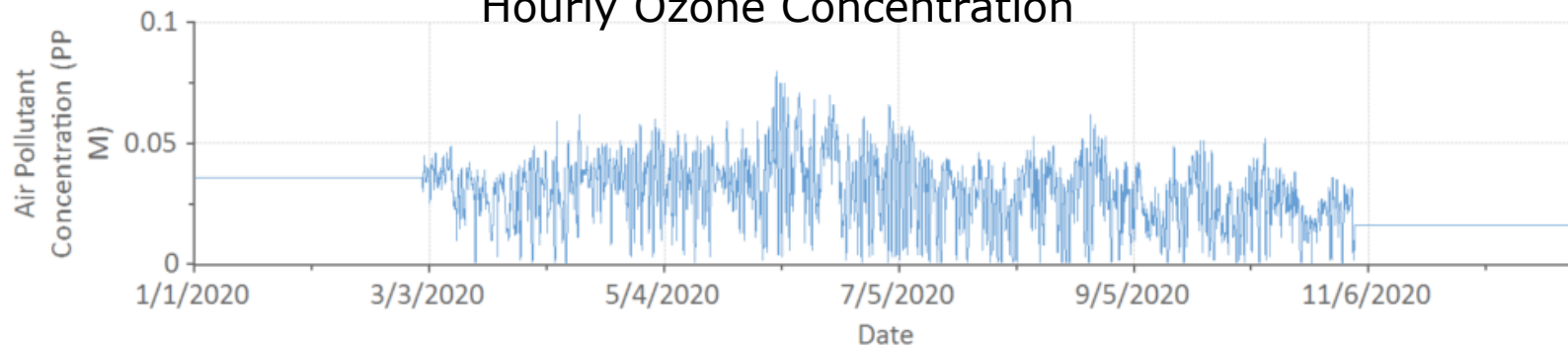
Appendix VI. Potential Risk of Pests

Fifty-three insects and diseases were analyzed to quantify their potential impact on the urban forest.

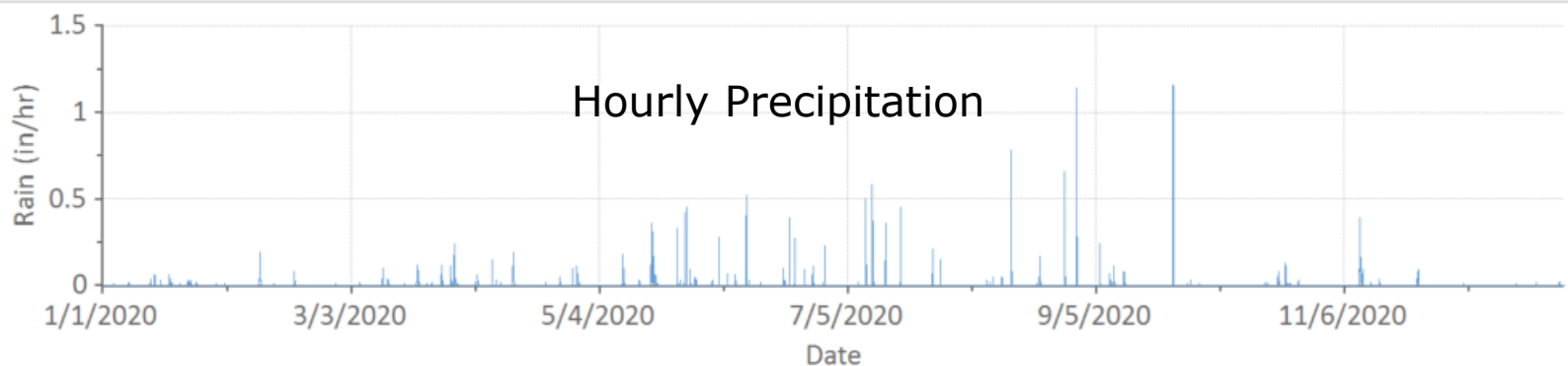
Code	Scientific Name	Common Name	Trees at Risk	Value
			(#)	(\$ thousands)
AL	<i>Phyllocnistis populiella</i>	Aspen Leafminer	30	8.94
ALB	<i>Anoplophora glabripennis</i>	Asian Longhorned Beetle	5,080	6,037.13
ARCA	<i>Neodothiora populina</i>	Aspen Running Canker	0	0.00
ARD	<i>Armillaria</i> spp.	Armillaria Root Disease	4	2.86
BBD	<i>Neonectria faginata</i>	Beech Bark Disease	0	0.00
BC	<i>Sirococcus clavigignenti juglandacearum</i>	Butternut Canker	145	273.64
BLD	<i>Litylenchus crenatae mccannii</i>	Beech Leaf Disease	0	0.00
BM	<i>Euproctis chrysorrhoea</i>	Browntail Moth	891	335.73
BOB	<i>Tubakia iowensis</i>	Bur Oak Blight	105	291.08
BSRD	<i>Leptographium wagneri</i>	Black Stain Root Disease	4	2.86
BWA	<i>Adelges piceae</i>	Balsam Woolly Adelgid	1	0.25
CB	<i>Cryphonectria parasitica</i>	Chestnut Blight	0	0.00
DA	<i>Discula destructiva</i>	Dogwood Anthracnose	0	0.00

i-Tree Eco detailed results

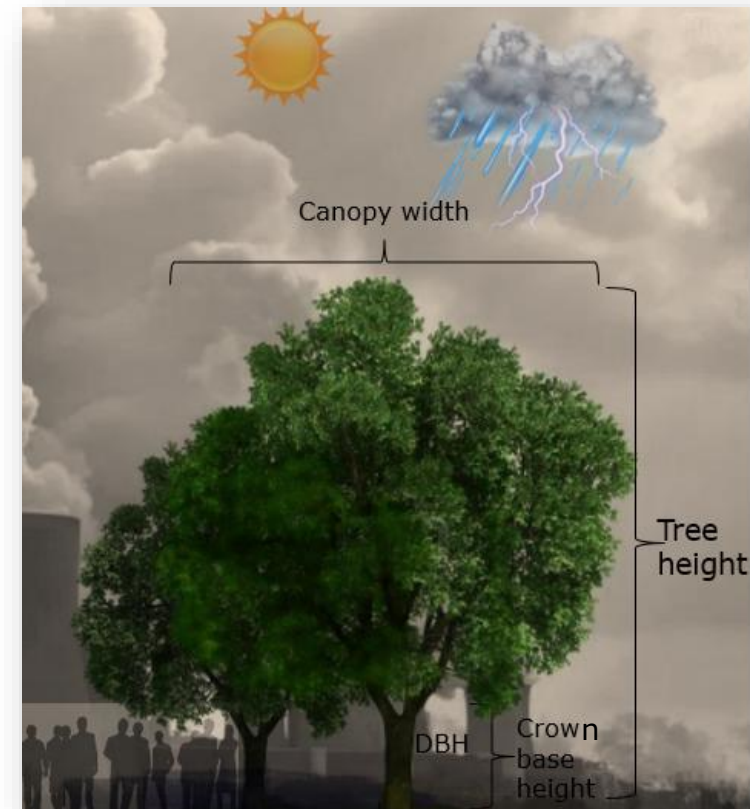
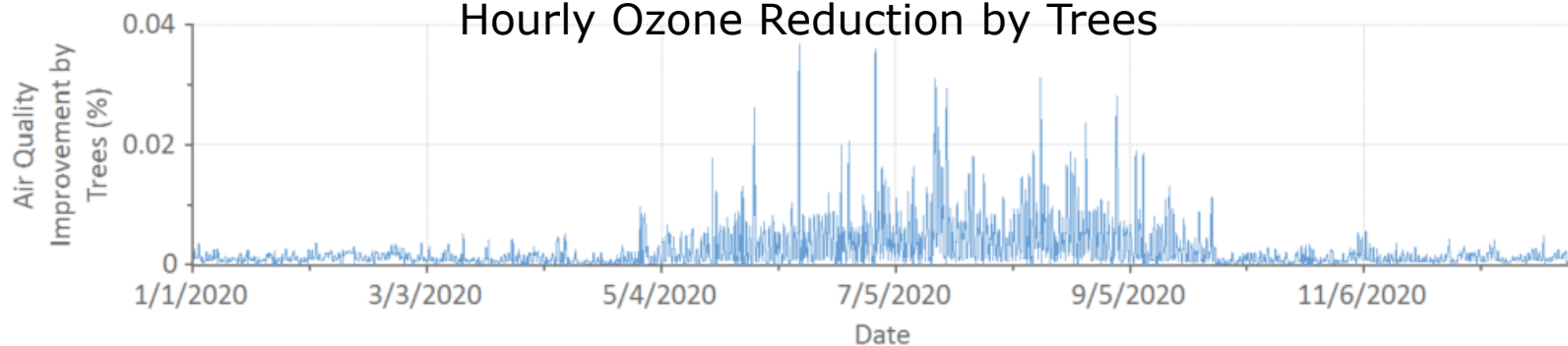
Hourly Ozone Concentration



Hourly Precipitation



Hourly Ozone Reduction by Trees



Air Quality Health Impacts and Values by Trees

Location: Rochester, Olmsted, Minnesota, United States of America

Project: Rochester Street Trees, Series: 1, Year: 2023

Generated: 4/18/2023

Health Outcome	NO2 (\$/yr)	O3 (\$/yr)	PM2.5 (\$/yr)	SO2 (\$/yr)	All (\$/yr)
Acute Bronchitis			0.05		0.05
Acute Myocardial			13.31		13.31
Acute Respiratory	0.99	77.97	28.87	0.17	108
Asthma Exacerbation	39.16		19.05	3.69	61.9
Chronic Bronchitis			72.41		72.41
Emergency Room Visits	0.10	0.13	0.10	0.05	0.38
Hospital Admissions	21.86	31.31		4.49	57.66
Hospital Admissions,			3.16		3.16
Hospital Admissions,			2.24		2.24
Lower Respiratory			0.34		0.34
Mortality		3153.14	5791.25		8944.39
School Loss Days		38.07			38.07
Upper Respiratory			0.25		0.25
Work Loss Days			8.95		8.95
Total	62.10	3300.62	5939.98	8.41	9311.11



Is i-Tree Eco the right tool for you?

i-Tree Eco: Advantages

- **Local Modeling** – Eco uses available local hourly weather & pollution data and other local characteristics for modeling
- **Dynamic model** – constantly improved with new science, new international locations, new reports and functions
- **Flexible** data collection and project design maximize user base.
- The **Eco import** option is a great way to assess existing tree inventory data quickly

The screenshot displays the i-Tree Eco software interface. The main window is titled "[Project: Oconomowoc Parks] [Series: Park trees] [Year: 2017] - i-Tree Eco". It features a menu bar with File, Project Configuration, Data, View, Reports, Forecast, and Support. Below the menu is a toolbar with icons for Project Definition, Land Use, DBH Class, Condition, Project & Strata Area, CSV, and Editing Mode. The Project Configuration window is open, showing the Project Definition tab. It prompts the user to "Enter project overview information and click OK to save it or Cancel process." The window has tabs for Project Settings, Location, and Data Collection Options. The Location tab is active, showing fields for Nation (United States of America), State (Wisconsin), County (Waukesha), Place (Oconomowoc), Is the study area Urban? (checked), and Population (15759). Below these fields, it asks the user to "Please specify the following years for your project:" with a dropdown for Weather & Pollution Year set to 2015. It also asks to "Please select a weather station to use for your project:" with a text field containing 726400-14839 and a Show Map button. To the right of the main window is a Weather Station Selector map showing a map of the Oconomowoc area with several weather stations marked. A yellow box highlights a text instruction: "Use the map below to select a weather station to be used with your project. Simply click a station marker to select it; click a different marker if you change your mind." A pop-up window for the selected station, GENERAL MITCHELL INTERNATIONAL, displays its details: ID: 726400-14839, Year: 2015, Elevation: 204.20 (meters), Position (lat, lon): 42.95, -87.90, Annual Hourly Precipitation: 858.01 (millimeters), Annual 6-Hour Precipitation: 851.91 (millimeters), and Collection Completeness: Fair. It also notes "The data for this station is from the NCDC." A legend on the right side of the map shows location distance radius options (1 mile, 5 miles, 10 miles, 25 miles) and weather station icons for Selected, Good Completeness, Fair Completeness, and Poor Completeness.

i-Tree Eco: Advantages

- **Options to improve the model.**
e.g. users can submit new species, hourly rainfall data, biomass equations ([i-Tree Database](#))
- **Flexible results** – Eco reports by species, strata, and individual tree to help with strategic decision making.

The image displays two screenshots related to the i-Tree software. The top screenshot shows the i-Tree Database web interface, version 0.11. It features a navigation bar with links for Home, Project, View Database, Add to Database, Menu, and Feedback. The main content area is titled 'Species' and includes a welcome message for user Al Zelaya. Below the message are input fields for 'Genus Name' (set to 'Fagus'), 'Species Name' (empty), and 'Family' (set to 'Fagaceae'). There are also buttons for 'Add New Genus' and 'Add New Species', and a 'Required' label next to the species name field.

The bottom screenshot shows the i-Tree Eco software interface. The top menu bar includes options like File, Project Configuration, Data, View, Reports, Forecast, and Support. The 'Reports' menu is open, showing options for Project Metadata, Submit Data, Track & Retrieve Results, Written Report, Composition and Structure, Benefits and Costs, Individual Level Results, Pest Analysis, Pollution and Weather, Charts, English, Common, Coordinates, Comments, Model Notes, Map Active Report (beta), and CSV (beta). The main window displays a report titled 'Hydrology Effects by Individual Trees' for the project 'Hartland' and series 'Complete Inventory, Year: 2012'. The report includes a table with the following data:

Tree ID	Species Name	Leaf Area (m²)	Potential Evapotranspiration (m³/yr)	Evaporation (m³/yr)	Transpiration (m³/yr)	Water Intercepted (m³/yr)	Avoided Runoff (m³/yr)	Avoided
1	Ulmus americana	1,962.0	147.4	16.6	54.8	16.7	3.3	
2	Ulmus americana	1,688.1	126.8	14.3	47.2	14.3	2.8	
3	Ulmus americana	2,034.2	152.8	17.2	56.8	17.3	3.4	
4	Ginkgo biloba	255.6	19.2	2.2	7.1	2.2	0.4	
5	Ginkgo biloba	356.3	26.8	3.0	10.0	3.0	0.6	
6	Ulmus americana	699.8	52.6	5.9	19.6	5.9	1.2	
7	Fraxinus americana 'Autumn Purple'	214.5	16.1	1.8	6.0	1.8	0.4	
8	Quercus bicolor	216.8	16.3	1.8	6.1	1.8	0.4	

Use i-Tree Eco ...

- ... when you have existing data.
- ... when you have resources for a large-scale project.
- ... if you can make good use of the wealth of results.
- ... to support management.
- ... when interested in a plot-based sample.
- ... for centralized project management.

Try another i-Tree tool ...

- ... when working with students or the public.
- ... to show that trees have benefits.
- ... when time is limited.
- ... to start conversations on trees and tree benefits.
- ... when you are interested in canopy cover.
- ... for priority planning.



i-Tree Eco is flexible



Additional resources – project planning



Project Management

[Idaho Treasure Valley i-Tree Eco Project Management Report](#) - This document developed by David Stephenson, Idaho Department of Lands Community Forestry Program, provides suggestions, methods, tips and tools to help future Eco project managers.

[Eco Project Cost Estimation](#) - This document, developed by Eric Kuehler from Urban Forestry South, offers a cost estimate for an Eco project. Note - Numerous factors can affect project cost and this is provided only as a general guideline.

[Eco Project Time Estimation](#) - This document, developed by Eric Kuehler from Urban Forestry South, provides time estimations for planning and conducting an Eco project.

[Eco Project Timeline](#) - This document, developed by Eric Kuehler from Urban Forestry South, is an example of a Eco project time line for a county assessment.

[Eco Project Equipment List](#) - This is an example of equipment options for a typical i-Tree Eco project.

[Eco Report Explanation Brief](#) - This document, developed by Eric Kuehler, USFS Urban Forestry South, and Francisco Escobedo, University of Florida, provides a brief explanation of and uses for the i-Tree Eco reports.

[City of Milwaukee - Notification Letter](#) - This is an example on an access notification letter sent to residents provided courtesy of the City of Milwaukee.

[City of Milwaukee - Access Response Card](#) - This is an example on an Eco plot access response card sent to residents provided courtesy of the City of Milwaukee.

Data Collection Guides

[Eco Field Data Cheat Sheet \(1 page field resource\) updated 03.28.2021](#) - (16MB pdf) This two-page guide is great to have in the field for inexperienced crews or when you need a reminder of how to collect Eco data and measurements for a given tree. This document was developed by Naomi Zurcher of Arbor Aegis in support of the Swiss i-Tree Eco project.

[Casey Trees UFORE Management Guide](#) - This guide, which was developed by Casey Trees in Washington D.C., provides detailed guidelines for planning, managing and executing an i-Tree Eco project.

[Cascade Land Conservancy \(CLC\) Integrated Forest Assessment Report](#) - This document was developed by CLC in Seattle, WA, and describes outreach efforts and guidelines for planning and managing Eco plot access issues.

[Eco plot descriptions Powerpoint \(PDF\)](#) - This is a PDF file of a PowerPoint used for Eco plot training developed courtesy of Keith Sacre from Treeconomics

[Eco Data Explanation Sheet](#) - Brief description of Eco sample project plot & tree data collection options.

Additional resources - videos

Eco Basics, Project Creation, and External Import Steps

[Eco v6 highlights and overview - 5 min.](#) - video highlights features and options in the i-Tree Eco v6 application.

[Importing external inventory data into Eco v6 - 8 min.](#) - Instructions for setting up an Eco v6 inventory project and importing in external data.

[Eco v6 sample project creation - 8 min.](#) - Creating a plot-based sample project using the i-Tree Eco v6 application.

[Eco v6 complete inventory project creation - 11 min.](#) - Creating a complete inventory project using the i-Tree Eco v6 application.

Eco Plot Establishment

[Basic Eco sample plot establishment - 2 min.](#) - How to lay out a simple 1/10th acre plot for an Eco sample project.

[Eco wooded plot establishment - 3 min.](#) - How to lay out an Eco sample plot partially in a wooded area.

[Measuring plot reference object - 2 min.](#) - How to measure a reference or permanent object from an established eco plot center.

Eco Tree Measurements

[i-Tree Eco - Basic tree height measurements - 9 min.](#) - How to measure total tree height, height to live top, and height to crown base

[Simple tree DBH measurement - 2 min.](#) - How to measure a single stem tree (DBH) diameter at breast height.

[CLE - Crown Light Exposure - 3 min.](#) - How to determine the crown light exposure (CLE) for a tree during Eco field data collection

Using the i-Tree Eco v6 Mobile Data Collection (MDC) system

[Mobile Data Collection part 1 - How To Submit A Project To A Mobile Device - 5 min.](#) - In this video there are instructions concerning how to submit i-Tree Eco inventory and plot-based projects to the mobile data collector.

[Mobile Data Collection part 2 - How To Collect Data With The Mobile Data Collector - 8 min.](#) - In this video there are instructions concerning how to collect data with the mobile data collector for i-Tree Eco inventory and plot-based projects.

[Mobile Data Collection part 3 - Retrieving Data - 3 min.](#) - In this video there are instructions concerning how to retrieve data that has been collected using the mobile data collector for i-Tree Eco inventory and plot-based projects.

[Mobile Data Collection Project Management Tips - 3 min.](#) - This video is supplemental to the three-part series concerning the mobile data collector. In this video there are examples of, and solutions to, the sticking points we are aware of users encountering while using the mobile data collector.

[Mobile Data Collection: Recording coordinates for plot center or tree locations- 3 min.](#) - This video demonstrates using the Eco v6 Mobile Data Collection (MDC) system options for recording plot center or tree locations.