

i-Tree Suite Change Log (10/01/2014)

i-Tree Suite Version	Date	Application Version	Improvements
V6.0.8	10/01/2014	Eco 5.1.7	Alaska pollution analysis is included.
		iTreeUpdater v1.0.2	Fix XP path escaping PDA users are reminded to stay in V5 since V 2015 stops the support of PDA data collection.
		Hydro 5.0.8	Fixed Y2 scale in predicted streamflow components chart in executive summary Added metadata to Executive Summary – Streamgage ID and Weather Station ID Position DEM/TI buttons more intuitively in Raw Data Input form Added glossary to Executive Summary Set location from Raw Data Input TI form when possible Executive summary respects units selected by user Fixed legend sizes to prevent scrollbar display
V6.0.7	7/22/2014	Eco 5.1.6	Local currency exchange rate text is improved from version 5.1.5 in the benefit element price form
V6.0.6	2/21/2014	Canopy 6.1	Added new carbon sequestration rates. Updated national carbon storage rate. Improved performance for adding and editing of points, most noticeable over slow internet connections.
		Eco 5.1.5	Local currency exchange rate text is revised in benefit element price form Energy database is updated by adding the new locations Loading plots from GIS output files are revised. A background area conversion is conducted based on the specified unit in strata file In data importing for full inventory, fixed a bug of field landuse letter case issue Added MSSTDFMT.DLL to installation package

		Hydro 5.0.5	Corrected calculation of the Volumetric Efficiency Corrected Daily and Weekly calibration
		STREETS 5.1.5	Fix the import of streets created by users with the mobile app. Allow up to 10 characters in the Street Number field. Fix calculation of Total Released for CO2 benefits report.
V6.0.5	5/30/2014	Eco 5.1.4	Fixed the location database with adding a dummy tertiary partition if a secondary partition doesn't have a tertiary partition
V6.0.4	3/14/2014	Eco 5.1.3	Fixed "Invalid Null" error in submitting international project Fixed "bad file name or number" error in open project when file drive letter is not mapped Structural value for international projects is converted to local currency Price of runoff customized price is applied for international projects Fixed duplicated FIPS code issue in Location Database
V6.0.3	3/10/2014	Hydro 5.0.3	Fixed intermittent project save issue
V6.0.2	3/7/2014	Hydro 5.0.2	Update Topographic Index database, now provides true area of each TI boundary Add validation for processed weather files Add validation for processed stream gage files Add functionality to load processed stream gage data Add functionality to load processed weather data Set initial directory for file dialogs to location of .iHydro project file Add help text for calibration interval Update stream gage help text with link to file format Update weather/evaporation data help text with link to file formats Add condition where if no data is changed, weather and stream gage data aren't processed Set platform target to x86 for all libraries
V6.0.1	2/12/2014	STREETS 5.1.3	Fix crash due to index out of bounds error if 10 DBH classes are defined in the generation of the Benefit reports and the Replacement Value report
V6.0.0	1/20/2014	Eco 5.1.0	Fixed pie chart labels missing in exporting pdf files.

			<p>Fixed pest detection report bug when individual land uses do not have trees.</p> <p>Fixed bug in written report and other tables when individual land uses do not have trees.</p>
		STREETS 5.1.2	<p>Fixed reporting bug preventing the calculation and display of CO2 Avoided benefits.</p> <p>Corrected growth functions for Lower Midwest Climate Zone.</p> <p>Corrects invalid DBH codes when calculating benefits.</p> <p>Fixed reporting issues in the Land Use, Relative Performance Index, and Replacement Value reports where no inventoried trees exist.</p> <p>Fixes crash while creating report images in Excel due to a "0" height range.</p>
		Canopy 6.0 (web app)	<p>Adds benefit estimations based upon calculated tree canopy.</p>
		Design 6.0 (web app)	<p>Adds option for multiple structures.</p> <p>Trees and structures can be placed using new drag-drop interactions.</p> <p>Help text added.</p> <p>Cumulative and to-date benefit reporting added.</p> <p>Reporting revised to reflect current year benefits, future year benefits, future cumulative benefits and to-date benefits.</p> <p>Pollution avoided benefits algorithm revised to reflect energy savings model results.</p>
		Hydro 5.0.0	<p>Graphical user interface revised.</p> <p>Added onscreen help guidance.</p> <p>Added executive summary reporting.</p> <p>Simplified user input options.</p> <p>Non-gaged watershed support added.</p> <p>Added modeling capabilities for direct topographic index configuration.</p> <p>Bolstered weather data to include years 2005-2012.</p> <p>Added stream gauging data for years 2005-2012.</p> <p>Incorporates model updates.</p> <p>New sample project.</p>

			Updated and simplified manual.
V5.0.9	9/6/2013	Eco 5.0.9	Fixed Appendix III units (from lb to ton in English copy of written report) Added exporting to csv files for all pest reports
		STREETS 5.1.1	Removed duplicate rows from Bole Ht sheet in the SpeciesCode.xls file for the LowMidWXXX region. Fixes the resulting crash upon running the Replacement Value report. Fixed the bug preventing CO2 Avoided benefits from being calculated. Fixed a bug in detecting a project's version, which causes issues when upgrading old Stratum projects. Correct the bug causing the export of the Species Distribution report to crash if a zone does not contain any trees.
V5.0.8	7/18/2013	STREETS 5.1.0	Rewrite all reports to use stratified sampling when calculating citywide estimates. Remove "Other Species" categories from the reports. Remove the Summary option of the Population Summary report. Add reporting by Zone to the Species Population Summary report. Allow users to display Zone names. Fix bug causing Zones, Species, Trees, and Streets to be deleted if they were modified twice before saving. Fix bugs causing intermittent crashes due to failing to dispose of closed forms. Fix crash upon save when deleting an existing zone and recreating it.
		Eco 5.0.8	Creating reinventory project is added in the project setup form. Ground Cover entry is taken off since current data processor doesn't handle extra ground covers.
		Eco Mobile	Display the number of Plots and Trees currently selected.

		utility v1.0.2	<p>Will not allow users to reduce the size of the utility window beyond the default size.</p> <p>Display sampled plots in Green and unsampled plots in Black. Highlight selected sampled plots in Green and unsampled plots in Blue.</p> <p>Provide the user's default credentials when making web requests (in the background). This allows the utility to work from behind proxy servers that require authentication.</p> <p>Add an option to display All Plots, Sampled Plots, and Unsampled Plots.</p> <p>PercentShrubCover is made default to 0. i-Tree Eco doesn't expect a value of -1.</p> <p>Require the user to provide a password before attempting to retrieve the list of available data.</p> <p>Simplify the error message given during data retrieval. This also corrects the bug in the String.Format statement.</p>
V5.0.7	6/13/2014	Eco 5.0.7	<p>Avoided runoff section added in the written report.</p> <p>Rainfall (rev. 82, server side) interception routine is corrected in handling precipitation fell on canopies, drip from canopies, and directly fell on the ground (no canopy cover), and now divide the volume of these portions of precipitation into those fell on impervious and pervious covers.</p> <p>Full inventory energy is using climate region emission factor (before it is using local emission). In addition, the division factor for KWH is slightly changed.</p> <p>PM10 (less than 10 microns) is annotated as "less than 10 microns and greater than 2.5 microns"</p> <p>CSV export format is corrected for Pollution effect summary by species table in full inventory</p> <p>Stratified sampling and user drawn study area sampling are added in Google Plots generator</p> <p>Fixed a compatibility bug in written report of pollution removal to the project created in V4</p> <p>The discrepancy of pollution dollar values between written report and</p>

			<p>tables/charts are corrected.</p> <p>Fixed CSV exporting bug in Rainfall avoided runoff by Land Uses table</p> <p>Quotes are checked and not allowed in the entry in the Managing Landuse form</p> <p>Currency Exchange rate is added in the Benefit Price form for international project. This currency exchange rate will take effect if the individual pollutant or other item price is not entered.</p> <p>The sample projects' names are renamed.</p> <p>Web form's bug for missing trees are corrected</p> <p>International studies are now capable to handle the case that UFORE B and Water Interception are not calculated.</p> <p>Fixed the bug that International countries don't have currency symbol.</p> <p>The local price customization form now allows to enter a portion of elements' price and have a help button to explain how customized price works.</p> <p>The Dataset View is automatically set to what the data loaded to after users successfully loaded the data from the server.</p>
		Rainfall Runoff (server)	Modified the impervious percentage relation
		STREETS 5.0.2	<p>Fixed bug in linear interpolation algorithm used by Storm water and Carbon benefit reports.</p> <p>Limit Street Number to 10 characters.</p> <p>Limit Location Number to 9 characters.</p> <p>Prevent a race condition while displaying the user's chosen location. This prevents the application crash in some cases.</p> <p>Increase the maximum total number of segments from 46340 to 3,037,000,499.</p> <p>Fixed retrieval of multiple data submissions from the Streets Mobile utility.</p>
V 5.0.6	11/12/2013	Eco 5.0.6	<p>Fixed a bug of pollution reporting in written report, monthly pollution chart (earlier only contains tree. After correction, it contains both tree and shrub)</p> <p>Fixed a bug on non-printable currency symbol of 7 countries. It is replaced</p>

			<p>by the currency abbreviation.</p> <p>Fixed a bug on data loading on species that exist in trees but shrubs</p> <p>MapLanduse area is checked so it must be bigger than sampled area</p> <p>MapLanduse abbreviation is checked so it must not contains empty space</p> <p>In loading plots from files, it now accepts the heading with both \$U4STAR! and \$ U4STAR! (with a blank space between \$ and U)</p> <p>Fixed a bug in data loading from PLOTINV2.OUT file when the values represented as a single dot.</p> <p>The "Add Page" is added in the shrub editing. Now there is no limit for the shrub data entry</p>
		STREETS 5.0.1	<p>Fix issue with SoCalCSMA's resource file.</p> <p>Fix deletion of Site Types</p> <p>Fix bug resulting in crash while adding new Zones.</p>
V 5.0.5	10/4/2012	Eco 5.0.5	<p>Fixed a bug of full inventory energy table for Western Australia</p> <p>Word "Beta" is removed from the form caption for Australia projects</p> <p>Fixed a bug of sending trees to web server in mobile utility</p> <p>Fixed a bug of submitting data for processing for Western Australia projects</p>
V 5.0.2		Eco 5.0.2	<p>A setting bug is fixed in mobile utility for sending full inventory project</p> <p>Fixed a bug "no data" bug in table "Condition of trees by DBH and land use"</p> <p>Fixed a bug in table "Energy effects"</p>
V 5.0.0		Eco 5.0.0	<p>Mobile utility is developed. Users are able to collect data through web interface by smart phones (iPhone, Android etc)</p> <p>Google Map plot generator is added.</p> <p>Report menu is reorganized.</p> <p>BenMAP air quality public heath report is added for US projects.</p> <p>Added function for customizing carbon, therm, kwh and pollutants prices.</p> <p>Pest analysis tables are added</p> <p>Fixed bug. Now reference dbh allows decimals</p> <p>Fixed bug. Now the dbh of tree is allowed to be more than 200 but less than 500 in metric unit</p> <p>In sending data for online processing, phone number format is no longer</p>

			<p>restricted. A confirmed email is now required for verification</p> <p>Now tree height must be more than 20 feet before entering building interaction data</p> <p>Plot notes field changed the type from text to memo. It can hold more than 250 characters.</p> <p>Added integrity check with map landuse abbreviation and description</p> <p>A new section "Pest Susceptibility" is added to the written report</p> <p>Options of project configuration are changed. The ability of modifying options of projects is added.</p> <p>The sample projects are updated by pest sample added.</p> <p>Rainfall interception report is added</p> <p>Standard PM2.5 (air particles less than 2.5 micrometers) and biogenic volatile organic compound (BVOC) emissions are added.</p> <p>Extended Australia and new Canada functionality</p>
		PDA App 5.0.0	<p>Check that stems exist before Edit or Delete</p> <p>Allow 0 for Height to crown base</p> <p>Allow distance to plot center ≥ 0 and ≤ 100</p> <p>Update reference objects to allow up to 1000m away</p>
		Eco PDA Utility 5.0.0	<p>Update to Year table in Input Database is removed while loading data</p>
		Vue 5.0.0	<p>Summary report for regular NLCD stats</p> <p>Summary report for all the analysis options</p> <p>Updated the user interface</p> <p>Updated the processing text on the main screen - hopefully prevents the screen from locking up where it looks like Vue has frozen. I.e. keeps flashing...</p> <p>Added help text to that same processing text when some tool buttons are pressed</p> <p>Analysis Options switchboard (replaces the drop down) and help text</p> <p>Added help descriptions of Analysis Options</p> <p>Added a button that takes user to i-tree website-based Vue News page</p>

			<p>Define project AOI / NLCD Clip functionality streamlined</p> <p>Google view and Google find panning with images</p> <p>Extent rectangle on Google Find/ Google Vue</p> <p>Printer dialog now instead of shooting straight to default printer</p> <p>Updated extrinsic pollution values</p> <p>On reports, if land cover classes have 0 acres, not displayed</p> <p>Land Cover Change tool</p>
		STREETS 5.0.0	<p>Added Mobile Web Forms and utility. Users are able to use smart phone to collect data through web interface.</p> <p>Fixed bug preventing changing a Non-Tree into a Tree.</p>
		Canopy (web app)	<p>Added "Define Project Area" functionality</p> <p>Added "Change Survey" analysis via Google Earth.</p>
		Design (web app)	<p>Integrated i-Tree Forecast function for projecting tree benefits in future years</p> <p>Ability to add multiple trees around a parcel</p> <p>Functionality for Canadian users</p> <p>Display of priority planting zones based on net tree benefits</p>
V4.1.7		Eco 4.1.6	<p>Fixed bug in tables of missing "City Total" row in five tables. This error is introduced when SAS processed data is being loaded.</p>
		Hydro 4.0.5	<p>Removed reference to ManagementCatchmentArea as it was not always reset properly and unnecessary</p>
V4.1.6		Eco 4.1.5	<p>Data editing error message (removed -1 from the valid entry such as tree height, dbh etc)</p>
		Hydro 4.0.4	<p>Reverse chart legend order so rain is at the top</p>
			<p>EMC units corrected to g/hr and 10⁻³lb/hr in chart and table</p>
			<p>Allow sorting on all columns in output table, automatically clear total rows on sorting.</p>
			<p>Updated Hydrology.exe which will now properly handle NODATA values and other bug fixes</p>
		STREETS	<p>Correct benefit values for SoCalSMA region</p>

		4.0.4	
		Vue 4.0.1	<p>Miscellaneous</p> <ul style="list-style-type: none"> • App file path changes • Add LEAD Tools Copyright text to About screen • Fix Google code - Right click not working on LC pixels • Fix Google code - Distance and Bearing not working over top of pixels • On clip window, map windows for TC/IC/LC are out of alignment • Negative value for Dev Hi Intensity Avail Space after adjustment of TC/IC. • New NLCD zones (Kuehler msg) implement AI's suggestion of note at bottom of Adjustment form • ArcGIS v10 clipping protocol • Re-Clip Washington in ArcGIS v10 for colors/eliminate gray palette • Updated updater code • Help Button not visible on adjustment form • Printer dialogs added to choose printer • Fix truncation of: O3 (C/P) "per poun" in reports • Add i-Tree Canopy suggestion for TC/IC adjustment %s on adjustment screen help • Report: for LC classes with 0 acres – no longer included in reports
			<p>Google Enhancements</p> <ul style="list-style-type: none"> • Clip: NLCD footprint rectangle on Google • Find/Vue/Clip: Current Vue view extent rectangle on Google window on zoom <ul style="list-style-type: none"> ◦ (Need to make this rectangle move with pan – v5 release) • Toggle legend button from Google Vue window • GoogleVue: buttons to toggle pixels visible/invisible • GoogleVue - re-write LC, TC, IC, AnalysisOutput to Google API v3 to support pan and zoom • GoogleVue: pan Google window to Lat/Lng coordinates of NLCD image centers • GoogleVue: zoom to extents of NLCD images (given differing Google Maps window size) • GoogleFind - re-write to Google API v3 for pan/zoom • GoogleFind: Pan/NLCD • GoogleFind: Zoom/NLCD • Clip: check if FIRST user point is inside NLCD image area as well as subsequent points • Clip window - re-write to Google API v3 to support pan and zoom • Clip: zoom to NLCD image extent on NLCD image extents button • Clip: auto zoom to NLCD image extent when first loaded/clip window first opened • Clip: simplified draw polygon process -added delete vertices functions (no more separate delete last vertex button) • Clip: simplified draw polygon -added drag vertices functions –on-the-fly adjustment of

			<p>polygon</p> <ul style="list-style-type: none"> • Clip: simplified draw polygon - no more close/finish polygon button – coordinates update with each polygon change/edit • Clip: on hitting Draw AOI on NLCD button, make Google AOI drawing visible, but no longer editable (lower right Reset button becomes only option to start COMPLETELY over) • Clip: streamlined the onscreen help text, reduced steps & numbered steps now match with numbered buttons on screen
V4.1.5		Eco 4.1.4	Fixed the “no current record” bug in written report while generating two dominant ground cover percentages if there are less than two actual ground covers.
			Species Name Format: have choice in View menu for Scientific Name and Common Name
			In written report: a message to close Microsoft Office Software will pop up if clipboard accessing error encountered
			Sending and Receiving for SAS online processing: ftp error is fixed in Window 7 operation system
			Fixed the bug when tree id or plot id is more than 5 digits
		Eco PDA utility v4.1.2	Properly handle null values when the Pocket PC’s XML file is updated with IPED fields.
V4.1.3			Corrected version of WeatherStations.mdb included in installer
V 4.1.2		STREETS 4.0.3	Force upgrade to i-Tree Streets PDA v4.0.1
		STREETS PDA 4.0.1	Write Project Data File in UTF8 format to fix issue with international characters
		Hydro 4.0.3	Change the weather data query to the range of gauge station data range
			Fixed the bug of location database reader in hydro pollution data processing
		Eco 4.1.2	Added New South Wales of Australia on SAS online processing
			Fixed cvs export standard error data missing in one table
			“Beta” word added to the application title for Australia projects
			Written report and tables/charts now reflect the local currency symbols
			SAS online now have trees and shrubs processed for pollution separately

			Fixed a leaf area density discrepancy bug between tables “Per-Area Estimates for Trees” and “Leaf Area and Biomass for Trees and Shrubs” when a project is configured to use variant plot size and shrubs are not collected.
			Hourly pollution charts are now enhanced by offering additional selections by trees, shrubs or combined.
V 4.1.1		Eco 4.1.1	In project creation form, if an existing location is selected, the controls in Location frame are disabled, so as Series frame and Year frame Fixed the bug when submitting for model process of international projects “Primary Partition Name (or State name) can not be Null” PEST module is developed. Full Inventory Importing is developed. In menu View/Dataset, 20 items limitation is removed. Victoria of Australia is treated as in USA now for SAS online model processing Manual is updated. FieldLanduse “N” (Industrial) from version 3 is changed to “C” (Commercial/Industrial) in FieldLanduses and Trees tables in exporting to model process Fixed bug “subscript out of range” when species is less than 10 in written report
		Eco PDA Utility 4.1.0	PEST Module is developed
		Eco PDA 4.1.0	PEST Module is added for data transferring
		STREETS 4.0.2	Changed Company Name to “iTree” Moved location of IPED data to i-Tree\Streets folder within the use’s application data folder Updated climate zone map Fixed crash upon failing to load IPED Matrix Check for PDA version 4.0.0 Improved support for GPS devices in PDA

			Fixed potential crash upon save due to .NET bug in PDA Improved backup support
		Hydro 4.0.2	Set currently selected parameters in configuration form Ignore current time zone for StartDate and EndDate in Raw Data Import Form Set download progress dialog box to be modal in Raw Data Import Form Allow 0% tree cover/evergreen values in Raw Data Input form Bug fix when using data spans two or more years
V 4.0.1		Eco 4.0.1	Model Processing is automated.
			In the input database, a field PercentMeasured (long type) is added in SubPlots table
			MDE is now allowing to enter percent measured for plot
			The form Plot generator is rewritten for manual plot adding
			In the input database, fields WeatherStationID and YearOfWeatherData are added
			In Menu "Edit", a sub item called "Manage Map Landuse" is added
			Google map component is added for selecting weather station. In project setup, user is required to select a weather station id for UFORE-D process
			In MDE, "Delete Plot" is added
			In MDE tree data entry form, "Delete" tree and "Undo" edit buttons are added.
			A new chart "Hourly pollutant removal by trees and shrubs" is added for UFORED result report
			The chart "Monthly pollutant removal by trees and shrubs" and the table "Pollutant Removal" are rewritten
			A report "Model Processing Notes" is added in the Reports menu
			Label NR is changed to STAT in MDE tree data entry form
			Paper collection form for sampled project has corrected some typos
			A sample project for full inventory is added. A sample project for plot based (or sampled) project is rebuilt. Menu under File for opening sample projects

			is change.
			Updated user manual
		Eco PDA Utility 4.0.0	Updated the PDA utility's plot import form to use VSFlexGrid instead of DBGrid which was not displaying values (only empty cells.)
			Changed dialog boxes to be modal instead of hiding the main form. This avoids the program left running in the background when the user clicks the "X" in the upper right to close dialog. Forms are explicitly loaded and unloaded now.
			Added X for surveyor form
			Handled -1 as default SubPlotSize (should never happen, but it did in a test project I had.)
			Insert value for Percent Measured into input database
			Updated user manual
		PDA Application 4.0.0	Allow single digit direction in Compass Control's manual entry
			Backup: Use API to find storage card
			Add I, P, and U as status
			Shrub details sum of percent in entering data must be 100%.
		Streets 4.0.0	Add new dynamic IPED reports
			Add "Create New" and "Select Existing" project database options
			Update About Screen and User's Manual
		Vue 4.0.0	added "google find" to identify the point location on Google maps
			added "Google vue" to mosaic 11x11 pixels of NLCD data onto Google maps
			added the ability to tie into ECO project
			added a simple clip function
			created map tool buttons
			added TC and IC correction factors

			interface update
		Hydro 4.0.0	New application in Version 4
		Species 4.0.0	Added user interface for International users
		Storm 4.0.0	Updated display.
V3.0.19		Streets v3.0.15	Fix potential crash in City Information dialog if invalid location information is encountered.
			Fix misplaced project version check during import inventory.
			Fix type of PestId in the IPED XML schema definition file so that it is imported properly.
			Add globalization support for reading default benefit values.
			Add globalization support for reading pest matrix.
V3.0.18		Eco v3.0.15	In project configuration setup, single quote and double quote now is prevented from entering in Location, Series fields
			Handled comma, dot, and blank in SAS output numeric values when loading data from Forest Service
			Added a function to check the duplicated species in SAS output files when loading data from Forest Service for reporting
			Delete button added In MDE
		Eco PDA Utility v3.0.12	Changed the distance to plot center to decimal
			Filtered out industrial landuse to match to MDW
		Streets v3.0.14	Fixed crash while trying to delete a large number of trees.
			Fixed incorrect calculation of # of Segments Sampled. Also fixed Zone editing/modification, and possible errors in Annual Benefits reports.
			Added Export Inventory options (CSV, & XML)
			Added online IPED updates.
			Added Footnote to Carbon Stored report.
			Renamed NetCarbonStorage sheet to CarbonStorage during export.
			Fixed opening of Stratum 3.4 based projects.

			Updated project format to include project versions and IPED dates.
			Fixed crash during reporting when a Null species code in encountered.
		Streets PDA v3.0.13	Used API to auto-detect storage device in backup form replacing previous hard coded storage device.
			Prevent Pocket PC from entering low power mode while GPS is running by reset system idle timer when GPS receives data
V3.0.17		Eco v3.0.14	Added Print Plot button in Sample Plot MDE
			Added Comments for trees in Sample Plot MDE
			Moved comments editing from plot notes to Tree notes internally
			Changed DS from integer to decimal
			Data loss for multiple page tree editing in MDE
		Eco PDA Utility v3.0.11	Fixed unknown species bug (unknown species detection)
			Refresh ground covers on PDA when retrieving data
			Solved DS decimal rounding issue when sending/retrieving data
		Eco PDA v3.0.11	Fixed inventory tree search
			Fixed Inventory/sample re-measurement status field
V3.0.16		Eco v3.0.13	Removed undesired post stratification
			Fixed location database (added missing table Temperature)
		Eco PDA v3.0.10	Changed "No Trees on Plot" to only modify actions menu, instead of disabling the "% Tree Cover" combobox and setting it to 0. Actions combobox menu will be modified when "% Tree Cover" > 0 and "No Trees on Plot" is not checked
		Eco PDA Utility v3.0.10	Changed PDA version check to 3.0.10
		Species v3.0.5	Fixed location database (added missing table Temperature)
			Resize suite version label to fit all version numbers
		Streets v3.0.13	Fix crash in Species Distribution report when there aren't at least 5 different species types in each zone

			Fix crash in Relative Performance Index report when there are no trees to report on
			The Manual is updated
V3.0.15		Eco v3.0.12	Input database changed Crownbase to limit 450, TreeHeightLiveTop limit to 450, TreeTotalHeight to limit 450, CrownWidth (EW,NS) limit to 300. MDE also changed accordingly.
			Ground Cover data input in MDE is changed to Grid.
			A new report table "Most Important Species" is added
		Streets v3.0.12	Added Central Florida climate region
		Species v3.0.4	Main form screen resized to have height compatible to 600 pixel screen
			Location database is now using a shadow database to avoid exclusive access violation
		Eco PDA v3.0.9	Constrain tree values to match input database rules
			Fix crash on nonalphabetic character in search box
		Eco PDA Utility v3.0.9	Unknown Species code checking is only applied to completed plots. The data for all uncompleted plots will remain the same in PDA application allowing users to edit for the second chance.
			Brought back the groundcovers editing form (which modifies input database now). The editing form will not allow edit the standardized ground covers. It allows to add/edit/delete customized ground cover with ground cover ID starting from 51.
			Switched ground cover editing grid to VSFlexGrid, which eliminated the occasional grid data invisibility to users
			PDA application version check is now conducted through a .NET method which directly retrieves the version from PDA application itself, eliminated the version inconsistency (previously it reads from version.txt file in PDA causing possible inconsistency). The .NET version checking method is contained in new MDBDAndS.dll.

V3.0.14		Eco PDA v3.0.7	Updated all version information to be consistent with Eco PDA Utility
		Eco PDA Utility v3.0.8	Removed "Import information from Location Database," "Add/Edit/Delete Additional Ground Cover Types," and "Populate Field Input Database with Cover Types" dialogs from the Project Setup tab. Necessary code runs automatically.
			Changed version check for PDA Application
V3.0.13		Eco v3.0.10	Fixed error "item not found in collection" in Sending data to Forest Service
			Added EAB susceptibility report
			In MDE, 13 pages limit of trees editing per plot is no longer exist.
			In MDE data editing, species editing now allows the toggle between species code, botanic name and common name
		Streets v3.0.11	Refresh current report after modifying annual costs.
			Fix crash that can occur upon running reports.
V3.0.12		Eco v3.0.9	
			Fixed data editing bug when species name starting with letter x
			Allow user to enter species for dead tree hardwood and dead tree softwood
			Fixed the bug in written report for international users when energy option is not available
			Includes updated Eco user's manual v3.1
		Eco PDA Utility v3.0.6	Use API to launch external applications, fixes Windows 7 Compatibility
			Fix Send Tree Data form to only show trees from current Eco project
			Add MACCLASS/PICLASS (Dead unknown hardwood/dead unknown softwood) to species database on PDA; always send Species Database to PDA when sending configuration
			Alter Middle Database to accept species code of 8 characters
		Streets v3.0.10	Fix crash in Define Species dialog due to duplicate species codes with differing cases.

			Correct spelling of "short holes" to "shot holes" in Insect Signs options.
		Streets PDA v3.0.10	Add GPS API option to support buggy GPS devices.
			Allow GPS Direct entry after Start GPS fails.
		Storm v3.0.4	Fix incorrect PDA application version issue.
V3.0.11		Streets PDA v3.0.9	Fix crash upon save due to a bug in .Net CF
			Correct display of the Comment panel on square displays.
			Clear all held location fields upon clicking the Clear Location button.
			Store the averaged GPS coordinate values rather than the last received values.
V3.0.10		Eco v3.0.8	Fixed the issue with species code "none" when loading reporting data from forest service
		Streets v3.0.8	Refresh current report after importing records from the PDA.
		Streets PDA v3.0.8	Fix potential crash upon exit.
			Fix high-resolution display issue with Comment box.
V3.0.9		Eco v3.0.7	fixed read only issue for species and location databases
			fixed naming issue for chart "Carbon Sequestration Density by Land USE"
			fixed plot size issue in page 21 of report writer
			fixed ordering issue in input data editing
		Streets v3.0.7	Display unmatched species codes in uppercase on reports.
			Add validation for GPS coordinates.
			Prompt for unmatched species codes after importing data.
			Only allow a record to be duplicated at most 9999 times.
			Update RPI report to use Condition factors.
			Correct the Population Summary report.
			Add pest common name to Inventory Details form.
			Remove duplicated summary lines from pest summary reports.
			Correctly import SurveyorID as a String and not an Integer.

			Updated sample project.
			Implement new IPED protocol.
		Streets PDA v 3.0.7	Return to the Edit Tree form after editing a tree.
			Ensure changes are made only when the user has made them.
			Add Pest common name selection field.
			Update pest tabs for new IPED protocol.
			Correct display issues as a result of modifications added for square displays.
			Correctly handle canceling an edit of Pest data.
			Fix bug in GPS control resulting in data loss.
			Update GPS control to accept GPS coordinates in either +-Decimal Degrees or Decimal Degrees + Direction.
			Display invalid GPS coordinates to the user in the status pane.
			Display previously recorded GPS coordinates to the user when the GPS is ready to capture.
		Storm v3.0.3	Export Rural indicator as Y/N rather than yes/no.
			Correct Standard Error estimates provided by the template.
			Ensure rural trees are counted separately from all other trees.
			Correct tree removal estimates on the Post Analysis sheets.
			Extrapolate tree estimates on the Post Analysis sheets where possible.
			Correct the Brush Adjust lookup table to match the descriptions.
			Add Standard Error estimates for debris estimates.
V3.0.8		Eco v3.0.6	Community Map is brought back available
			Adding plots loop is changed to more intuitive way
		Streets v3.0.6	Corrected extrapolation for sample inventories for Pest, Maintenance, and Conflict reports.
			Moved report generation to its own thread. Removes race condition in user interface thread.
			Replaced Site Type reports.

			Replaced Other reports.
			Replaced Land Use reports.
			Replaced Pest Summary reports.
			Clarified report headers of all new reports.
			Updated export of Site Type, Other, and Land Use reports for Excel.
		Eco PDA 3.0.5	Added backup functionality
V3.0.7		Eco v3.0.5	Added 'Pack Project' sub menu in 'File' menu for data sharing
			If the input database and estimate database are not found in opening a project, it pops up file dialog box for browsing.
			Fixed a bug in table of Leaf Area and Biomass For Trees by DBH and Landuse
V3.0.6		Streets v3.0.5	Replaced Conflict reports.
			Replaced Maintenance reports.
			Fix crash while trying to delete existing Zones
			Mark all zones with errors on User Define Fields dialog
			Fix compatibility issues with Microsoft Excel 2007.
			Display the correct zone for the Pest Summary report.
			Fix crash in Species dialog for LoMidWXXX region.
			Fix crash upon opening the User Define Fields dialog as a result of a .Net bug.
		Streets PDA v3.0.6	Add support for square displays.
		Eco v3.0.4	Fix the "." Issue in the SAS output file
V3.0.4		Streets v3.0.3	Skip recording of DBH for non-trees.
			Abort export of reports if Excel is not installed.
			Replace charts in reports with place holder if Excel is not installed.
			Refresh current report after modifying benefit prices, city info, or annual costs.
			Refresh current report after switching between English to Metric or Common to Scientific modes.

			Add Pest Symptom Details reports.
			Fix crash while trying to modify the Average Home Resale's Value
			Fix crash in exporting Maintenance Summary reports.
			Use correct units during export of Canopy Cover report.
			Correct chart displayed on exported Canopy Cover report.
			Display correct charts for Site Type reports.
			Fix graph displayed on Canopy Cover report.
			Correct tree types displayed on Population Summary report.
		Streets PDA v3.0.4	Skip recording of DBH and default Primary Pest field to None for non-trees.
		Eco v3.0.3	Save Plot Size to series table's DefaultSubPlotSize field (this was not being saved anywhere.) Because this is by series and not year, if they modify the previous series DefaultSubPlotSize in PlotGenerator, they are prompted and informed that the size is by series and asked if they are sure that they want to change this.
		Eco PDA v3.0.4	Crash bug fixed when saving an edit without Hydro Option enabled
			Stem Edit button corrected, was referencing Tree ID in the query instead of Stem ID.
		Eco PDA Utility v3.0.4	(Grabbing Plot Size) First check if subplot exists, if it does get size from subplot. If no subplot, check DefaultSubPlotSize. If DefaultSubPlotSize is not -1 (default value,) then use default plot size of .1 or .04 (metric or English units).
V3.0.3		Eco V3.0.2	MDE: added dead tree status (R, H, C, L) data validation. Set Total Height (-1), Live Top (-1), Crown base height (-1), Crown width (N/S & E/W) (-1), Crown missing (100), Crown Dieback (100), Crown Light Exposure (-1), % Impervious Below Crown (-1), % Shrubs Below Crown (-1) to the default values
			Added suite version and app version in the About screen
			Added the rule: when a tree is added, tree status can only be "O". When a

			tree is edited, "O" can be changed to other status.
			Fixed a species record (SubGenus=x Cupressocyparis) in SubGenus table in species database
			Fixed the crash if DR and DS are empty
			Enable "Collected Data Permanent" in Inventory to let users set remeasurement on trees
			Allow PDA dead tree values in sample mode
			Use user's temp folder for 64 bit computers
		Eco PDA Utility v3.0.3	Updater set to check suite version
			Check for Wow64 and install appropriate device center on Vista
			Properly Remove completed plots from Pocket PC
			Add suite and app version info to splash/about form
		Eco PDA App v3.0.3	Fixed some bugs for GPS
			Added a "Direct Entry" button for manual entering of GPS coordinates
		Streets v3.0.2	Removed requirement of CityManaged field for existing Stratum projects
			Strip spaces from column names in Stratum_Inventory format
			Fix floating New button on Define Species dialog
			Add i-Tree Suite version to About form
			Fix reporting after creating a new project and then immediately importing data
			Prevent importing of Stratum_Inventory format if no SpCode column is present
			Ignore records whose species code is NULL or an empty string during import
			Correct species code comparison bug in Stocking Level report
			Ensure data sent to the PDA still exists in the project if it was modified and re-add it if necessary
			Refine entire reporting interface and prevent the application from crashing

			while running a report
			Fix an index out of bounds issue in Maintenance Top 5 report
			Correct issues in the Species Distribution report and the Canopy Cover reports when there is no data to report on
			Auto refresh the current report whenever the user modifies data and remove the refresh button
			Updated default list of species codes for various regions. Reconciled species code inconsistencies for Streets
			Fixed reporting issues when projects were initiated with one tree.
		Streets PDA App v3.0.3	Fixed some bugs for GPS
			Added a "Direct Entry" button for manual entering of GPS coordinates
		Storm v3.0.2	Save template as "Excel Workbook"
			Set file attributes to normal after copying the template
			Add suite version to about screen
			Updater set to check suite version
		Species v3.0.3	Add suite version
			Updater to check suite version
		Vue v3.0.2	Adjusted About screen and added suite version
			Added "Loss!": indicator appearing at wrong times on Developed, Classes Tree % change form
			Fixed run-time error via a Data Type mismatch on Developed, Classes Tree % change form