**Description of Urban Tree Inventory Processing Scripts**

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These scripts provide processing for the economic valuation of pest and disease risk of urban trees. There is one post processing script that extracts the valutation metrics and inventory metadata from the processed i-Tree inventories. The rest of these scripts provide inventory or municipality specific pre-processing to clean the data into a format that i-Tree ECO can read and evaluate.

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| **Filename** | **Description** |
| extractEco.py | Post processing script. This takes the completed i-Tree .eco files and extract the valuation metrics for each inventory.  *Input*: a list of inventory .eco filenames; a lookup list of pests and their hosts; a lookup table of FIPS state, county and municipality codes and names; a lookup table of genera scientific and common names.  *Output*: Two csv files, ‘inventoryMetrics’ and ‘pestValues’. inventoryMetrics contains the metadata and summary information for the inventory. pestTreeValues contains the risk valuation calculations per pest for each inventory. |
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| [TOWN].R | Preprocessing scripts, one per input file. These convert the mixed formats of the raw inventory data to standardized units and columns suitable for iTree Eco. Where species binomials are given they are checked against the ITIS database using the taxonomyCleanr package; where only common names are given they are converted to binomials through a species dictionary. Note that these scripts require supervision and may need mid-process modification depending on the state of the raw data. |