



i-Tree Eco Shapefile Attribute Requirements

June 7, 2010

GPS Shapefile (DBF) to Eco Database (MDB)

Minimum Required Attributes (with Required Names¹):

GPS Shapefile (DBF) Attribute	Eco MS® Access (MDB) Attribute	i-Tree Eco Table	Attribute Characteristics	EcoShape Validation
PLOTID (Optional)	PlotID (defaults to TreeID)	Plots & all other tables	Long Integer	≥1 and unique.
TREEID	PlotID (If no PLOTID from GPS) TreeID	Trees TreeDiameters	Long Integer	≥1 and unique.
SPECIES	Species	Trees	Text	8 characters; must be in Species.mdb; SpeciesList or GenusTable
DBH1	Diameter & StemID	TreeDiameters	Single	≥0.5 and ≤200
DBH2	Diameter & StemID	TreeDiameters	Single	≥0.5 and ≤200; or -1 (NO zero).
DBH3	Diameter & StemID	TreeDiameters	Single	≥0.5 and ≤200; or -1 (NO zero).
DBH4	Diameter & StemID	TreeDiameters	Single	≥0.5 and ≤200; or -1 (NO zero).
DBH5	Diameter & StemID	TreeDiameters	Single	≥0.5 and ≤200; or -1 (NO zero).
DBH6	Diameter & StemID	TreeDiameters	Single	≥0.5 and ≤200; or -1 (NO zero).
TREE_HT	TreeHeightTotal TreeHeightLiveTop	Trees	Single	>0 and ≤150
CRWN_BASE	HeighttoCrownBase	Trees	Single	≥0 and ≤150; or -1 for dead tree
CRWN_WD1	CrownWidth1	Trees	Single	≥0 and ≤150; or -1 for dead tree
CRWN_WD2	CrownWidth2	Trees	Single	≥0 and ≤150; or -1 for dead trees
MISSING	PercentCrownMissing	Trees	Integer	0 to 100 (dead tree)
DIEBACK	CrownDieback	Trees	Integer	0 to 100 (dead tree)
STREET (optional)	TreeSite	Trees	Text	1 character; ="S", "Y" Or "N"; convert "Y" to "S"; defaults to "N"
CLE	CrownLightExposure	Trees	Integer	≥0 and ≤5
COMMENTS	Comments	Trees	Text	255 characters

¹ All required attribute names are case sensitive.

GPS Shapefile (DBF) to Eco Database (MDB)

Recommended Attributes (with Recommended Names²):

GPS Shapefile (DBF) Attribute	Eco MS® Access (MDB) Attribute	i-Tree Eco Table	Attribute Characteristics	EcoShape Validation
xDateTime	xDateTime	xTreeData	Same as DBF	None

Other User Attributes (Examples):

GPS Shapefile (DBF) Attribute	Eco MS® Access (MDB) Attribute	i-Tree Eco Table	Attribute Characteristics	EcoShape Validation
xDiamHt	xDiamHt DiameterHeight	xTreeData TreeDiameters	Single	>0 and ≤6; defaults to 4.5' in TreeDiameters table.
xBotName	xBotName	xTreeData	Same as DBF	None
xComName	xComName	xTreeData	Same as DBF	None
xAllOtherUserData	xAllOtherUserData	xTreeData	Same as DBF	None; no limit on number of user attributes.

² Limit names to nine (9) characters, NO leading underscore “_”, upper and lower case is permitted. Prefix all user attributes with a lowercase “x”. There is no limit to the number of user attributes.