

UFST Database Issues

The following are minor, but very important database issues related to UFST tree assessment data.

This information helps establish a “chain of custody” for our data that may be helpful with FEMA and is also useful if field data problems are encountered.

Project Names

Shapefiles exported from each GPS data collector should have a standard naming convention for each deployment. A recommendation for that standard follows:

- Create at least one new project on the crew’s SOLOforest data collector **for each day**; multiple projects are permitted (e.g. morning and afternoon), but it is not necessary to separate street field work from parks..
- Accept the default file name that SOLOforest suggests (see export naming below); a TeamCrew prefix is probably redundant, but may be helpful if units are used by different crews or when crew makeup changes during the deployment
 - **T1C1_** (example for team 1 crew 1) as a prefix

At the end of the day, after all crew GPS data collectors are downloaded you will have in that day’s laptop folder, at least one set of shape

Helpful SOLOforest Settings

Set the following:

- Time
- Feature Name (somewhat redundant, but allows for the eventual merge of all street & park data)
- Feature Number (optional; see CrewNo discussion that follows))
- Prompt for name
 - As each set of shapefiles is exported, the team and crew identification should be added
 - **T1C1_** (example for team 1 crew 1) as a prefix

Remember: To also make certain that the shapefile export options have the “correct” coordinate system and datum.

Data Verification

TeamCrew It is important that data be identified with a specific crew. This is accomplished by having the crews enter their team/crew identification into (at least) the first tree recorded for each project.

When downloading and preprocessing data each day, the IT technician will open each crew’s shapefile and make certain that all tree’s have the TeamCrew attribute populated (open the attribute table, right-click on the TeamCrew column heading and use Field Calculator)

It is also important to keep a deployment document that identifies each of the crews for a team. For example:

Date	Crew Members	TeamCrew
Feb 27	Alan Moore (NC) Daniel Duncum (TX) Scott Noble (AR)	T1C1
Feb 27	Hugh Whitehead (FC) Jason Ellis (TX)	T1C2
Feb 27	Jim Cark (VA) Pete Smith (TX)	T1C3
Feb 27	Doug Petersen (FC) Wes Moorehead (TX)	T1C4
Feb 28	Alan Moore (NC) Daniel Duncum (TX)	T1C5
Feb 28	Scott Noble (AR) Eric Kuehler (UFS)	T1C6
Feb 28	Hugh Whitehead (FC) Jason Ellis (TX)	T1C2

ARKY Team Draft v1.0

Note: In this example new crew numbers should be assigned when crew makeup changes from day to day. Otherwise, crews that remain intact from day-to-day keep the original crew number.

This crew information can be part of the equipment signout sheet used by the Team Leader.

- CrewNo At the same time that the TeamCrew attribute is verified or assigned in each crew's shapefile, the IT technician should also create a new, unique attribute CrewNo. This should be populated with the Field Calculator as [FID] + 1. This will create a unique record number that will not change as edits & deletes may be applied later. TeamCrew + CrewNo will always create a unique identification in the database.
- If FEATNUM is in the attribute table it may be substituted for CrewNo. This will depend on SOLOforest settings in the feature file, however.
- Time If SOLOforest is correctly setup, the time stamp should also be applied that includes the date and time. Do not delete this attribute. It should be in the format: **09-30-2008 10:42:11**

Data Merging

Once all crew data (shapefiles) are verified, they can be merged together into daily and/or progress-to-date shapefiles for archiving, map making, and display.

See Also:

Project Creation Checklist and Guide (Draft) at <http://www.ufst.org/resources/library/project-creation-checklist-and-guide-draft/view>