



Tech Notes

► by **Scott Johnson**, director of Angus Information Management Software

Pedigree corrections

In working with an Angus Information Management Software (AIMS) user a few months back, we discovered that the user's AIMS data had incorrect pedigrees. As a result, we added a process here at the office to check the integrity of incoming data in the expected progeny difference (EPD) request files, since they included the necessary registration numbers. We created a report that we return to users to inform them of any problems that have been discovered. The report is automatically generated when you send in an EPD request file.

It's that return file that causes some confusion, so let me explain the whole thing.

It's more than one record

First, we need to review how AIMS "builds" pedigrees. In your mind, you might think of an animal as having one record with all of its ancestors in the same record. A three-generation pedigree would mean 15 animals are stored in one record. That visualization is incorrect.

Those 15 animals are actually stored as 15 unique records in the Angus table. Data in each animal's sire and dam tattoo fields

referring to the respective ancestor records creates the pedigree on appropriate screens and reports.

Let's say that Animal A's sire tattoo field says "B," and the dam tattoo field says "C." As a result, there must be animal records for B and C, and they have sire and dam tattoo field entries and corresponding animal records to build the next generation.

As you can see, the tattoo fields are the links that build entire pedigrees. Why not the registration number? Well, that's a different can of worms, and I don't have enough column space.

The pedigree-verification report

If the sire or dam tattoo field has incorrect information, even by one character, it can mess up the entire pedigree; the closer it happens to the animal in question, the bigger the mess. However, you probably will have to fix only that one sire or dam tattoo field for the rest of the pedigree to fall into place.

How did the problems occur?

- Simple typos. Let's say you're adding new animals (and *not* using the Calving tab), and you enter the dam's tattoo as "1298" instead of "1289." That's all it takes to change the entire maternal side of the pedigree.
- "Additional Animal" import issues. Previous versions of AIMS had a button to "Update Existing Animal." If you used that button at the wrong time, it could have changed what animal was stored and affected pedigrees.
- An AIMS bug. In previous versions of AIMS (before 2.0d), a loophole in the Additional Animal import process would create a pedigree problem. It only occurred if the great-great-grand sire or great-great-grand dam had a sire or dam tattoo that coincidentally already existed

in your AIMS set for a different animal. We have since fixed this loophole.

When you send us an EPD Request or Pedigree Verification request file, we can compare the registration numbers that are inside that file with the official records here at the American Angus Association. We ignore tattoos since they can be changed at will in your AIMS data set.

The report we send back to you includes only the animals that have problems. The file is a tab-delimited text file, which means you can open it in Word, Excel, or any other type of word-processing or spreadsheet program. Here's a list of the columns and an explanation of the data they contain.

- Animal Tattoo — identifies the animal that has a problem with its sire, dam or both.
- Animal Reg. No. — the registration number your system lists for this animal; this is the registration number of the animal our system looked up.
- AAA Sire Reg. No. — the officially recorded registration number of the sire of the animal listed under "Animal Tattoo."
- AIMS Sire Reg. No. — the sire registration number your AIMS system is storing. (If the sire information is included on a given animal line, there's a problem.)
- AAA Dam Reg. No. — same concept as sire, but for the dam.
- AIMS Dam Reg. No. — ditto.

How to use the report

Using our previous pedigree example of Animal A with sire B and dam C, let's say the report comes back with a line for Animal A and says the registration number of the sire should be 13 (for simplicity's sake), and your AIMS system shows the sire as 24. Apparently, B's registration number is 24. We need to find an animal in the AIMS database that has registration number 13.

You can do this with File, Open, Animal; go to the Advanced tab, enter 13 in the "Search For" field, and change "Search By" to "Reg. No." and click Find Now. Let's say that it finds the record in your system, and registration number 13 belongs to sire E. You don't do anything to B or E; you need to open animal A's file and change the Sire Tattoo field from B to E to correct the pedigree for that one generation.

What happens if there isn't an animal with registration number 13? You would need either to add that animal or to blank out the sire tattoo field of Animal A.

E-MAIL: scottj@angus.org

Summer releases

This summer marked the release of Angus Information Management Software (AIMS) version 2.1. The key feature was a change to the data structure, mainly to accommodate ultrasound expected progeny differences (EPDs).

We actually released the upgrade twice. The first CD is labeled "AIMS 2.1-1.1.2"; to make a long story short, the installation portion of the CD caused problems when running the program. (The problem only occurred if users started the *old* version of the program and only if they started it twice.)

Once we saw what was happening, we mailed everyone a second version of the CD labeled "AIMS 2.1-1.1.4" to correct the installation problem and to change the backup technique to a more reliable, although perhaps a little slower, method.

So the bottom line here is that you should not use the 1.1.2 CD; just throw it away. You need to install the 1.1.4 version. If you are the type who waits until a release is proven, you wisely have waited long enough. Version 1.1.4 has passed the test of time, and you can install it safely. In the meantime, we have released patch files on the Internet that can be installed to fix a couple of minor bugs and to add minor features.