Backing up vital business tools

I'm in the process of updating the Angus Information Management System (AIMS) Help file to distribute to all current and new AIMS users. (Hopefully it will be done by the time you read this column). And, since it seems I can never emphasize enough the importance of making backups of your AIMS data, here is an edited version of the new Backup section in the Help file.

AIMS includes a powerful command to make a backup of your entire database. A backup can be made with three clicks of the mouse: File, then Backup, then Save. Keep reading to understand more about the process.

BACKUP

How to make a backup

The process to make a backup of data is actually very simple. You choose File | Backup, then enter a filename and press Enter (or click on Save). By default, AIMS will build a filename for the backup including an extension of BKx, where "x" is a number from 0 to 9, which

automatically increments
each time a backup is
made. Normally, it
is better to type
your own
filename —
which can be a
Windows-long
filename (up to 256
characters) — so that the
file will mean something to
you in the future.

Again, your filename will have an extension added that starts with ".BK" plus a number.
The extension helps the Restore function know if the file is a valid backup, and the number in the extension further helps filenames to be unique.

Why make a backup?

A computer adage states, "If you don't want to type it again, make a backup." That's pretty good advice, because, as you know, Murphy's Law is working against you. Just when you can least afford to lose your data, you will lose it. The hard disk will crash, or any number of other horror stories will happen. You're out of luck unless you have a backup.

Points to ponder

Make backups very frequently to your hard disk, as often as every day you work with AIMS. You can use a rotational system where you make a backup with the name of the day as the filename — Monday, Tuesday, etc. It's normally better to have more than

one level of backup so that if one day's backup goes bad, you have the day before that to go back to. These "frequent" backups can be left in the default folder (\aims20\backup) on your main computer.

Occasionally, make
backups to a floppy disk,
tape, Zip disk or CD-ROM.
Making daily backups is
great until the hard disk
crashes, so be sure to save
some of these files (or copy
them after a regular backup) to
an external media such as a floppy

disk, Zip disk, tape or CD-ROM. You do this by changing the Save In field on the backup screen, then provide a filename. A rule of thumb would be to make an external backup once a week during peak data-entry season(s).

Once in a while, take one of these external backups to a location out of the building where your computer is located. While having separate backups saves you from a hard-disk crash, it doesn't save you from a more serious problem, such as the entire building being destroyed, perhaps by fire or flood. This is paranoia to the extreme, but your data is valuable and it's easy to protect, so put a backup on a disk and get it out of the building. Fire-safe boxes are an

alternative, but it's still recommended to take a copy elsewhere every now and then.

While you're making backups to disk, make another copy and send it to the AIMS Department (e-mail it to aimsfiles@angus.org). This accomplishes two things, 1) you get a copy out of the house/office and 2) we will check that it is a good backup to confirm that backups are being made correctly. You could do this once or twice a year.

When to make a backup

The basic time frame to make a backup is discussed in the previous section — daily to the hard disk and weekly to a floppy disk, plus take a copy off-site every now and then. But there's no law against making backups even more frequently. The following list includes some examples of other key times to make a backup so that, if something goes wrong, you can quickly restore it to the point just before you did the particular process. Make a backup:

- before you run a performance or expected progeny difference (EPD) update;
- before you run a calculation for weaning, yearling or carcass data;
- ➤ before you delete some animals, a pen, and especially just before deleting all animals in a pen;
- ► before you make big changes to the sort order or members of a pen; and/or
- ▶ before you import a file of additional animals.

Where to make a backup

With three clicks of a mouse (File | Backup | Save), AIMS will make a backup. In this case, AIMS puts the backup in a folder on your hard drive, or c: drive, in the main disk of your computer. The backup will be in a folder indicated by c:\aims20\backup and have a filename starting with the letter "B," then your member code. If your member code is six digits, it will have the number 0 — not the letter O — in front of the member code. (Newer member codes are seven digits.)

The dialog window that appears when you click File | Backup includes a Save In field. Notice that the Save In field is "Backup," which is a subfolder of c:\aims20. This is the

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default folder for backups. However, you can click on the down arrow at the end of the Save In field to select another location on your computer, whether it is a different folder or a different physical drive.

Do not assume that making a backup automatically means saving it to a floppy disk. You can save it to any logical or physical drive associated with your computer.

Backups can be saved in other types of media, including:

Floppy disk: The term "floppy disk" is misleading because the disk we're talking about isn't really floppy. The term floppy dates back to the very old 8-inch (in.) and 5½-in. floppy disks that actually were floppy. In other words, they would bend when you shook them. With the advent of 3½-in. floppies, the case got stiff, but the name remained.

Backup tape: Although they're still around, the use of backup tapes is fairly rare now that CD-ROMs are so cheap and prevalent. However, some high-end systems will still use tape drives that can back up huge amounts of data. Generally, making a

typical AIMS backup will be a miniscule file on a backup tape. More often, tape backups are made of the entire c:\aims20 folder — which contains the entire AIMS program and most supporting files.

CD-ROM: The term CD-ROM stands for "compact disk, read only memory" and is often just simplified to CD. Somewhat like tape backups, an AIMS backup will be rather small on the CD, but is such a cheap process, it's worthwhile and the file is virtually permanent whereas a file on a floppy disk, Zip disk or tape is subject to magnetic fields as well as degradation over time.

Zip disk: Similar to tape backups, this is a

somewhat older technology. A Zip disk is almost the same physical size as a 3½-in. floppy but thicker. As for capacity, it can be many times larger than a floppy, but not as much as most CD-ROMs (depending on the model of Zip disk).

How to restore a backup

The opposite of making a backup is the Restore function. Any time you need to go back to a previous set of data — whether it was forced on you due to a problem, or by choice after a test session — you simply need to use the menu commands File | Restore and choose a filename from the Backup

folder or some other location, even from a floppy disk.

The key to the Restore process is that you must understand that it will erase everything in the current database. Restoring to a previous database file will overwrite all data, including breeding records, weaning weights, comments, medical procedures — everything! After you choose File | Restore and select the file, you will get a message screen with a warning. Once you have answered yes, there's no turning back.

Note: Again, it is very important that you understand any data in the current database will be erased and replaced with the backup

data. It's a good idea to check the modify date of the file, which can be done as you select the file, to be sure you're not selecting a much older data file.

And finally, it is highly recommended that you get in a good habit of making backups. It's so easy to do, and it will help create a sense of comfort that no matter what happens, your data will be safe.

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