

Chapter 5

Backing up Your Data in Access and MySQL

What you will learn:

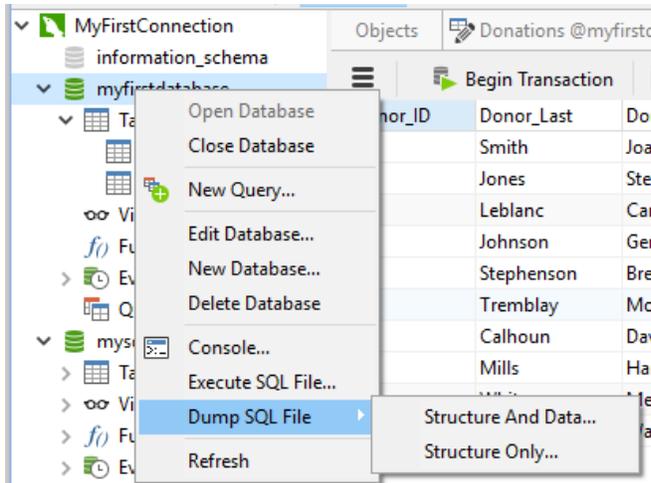
Making backup copies of your data in the Microsoft Access and MySQL database environments.

As discussed in Chapter 5 of the *Data Journalist*, making data backups is extremely important. Fortunately, this is surprisingly easy in both Access and MySQL.

In Access, which runs only on Windows PCs, you simply make a copy of the .accdb file (e.g. myDatabase.accdb), which will be located wherever you saved it on your hard drive. You can do this using the Windows Explorer; open two explorer windows, right click the file to be copied, then drag it to the second folder and choose the Copy here option. You can also highlight the file in the original folder, use the keyboard shortcut CTRL>C, then paste the copy into the new folder.

In MySQL, both on Windows and in OS X/macOS, there is a little more to backing up a file, but not much.

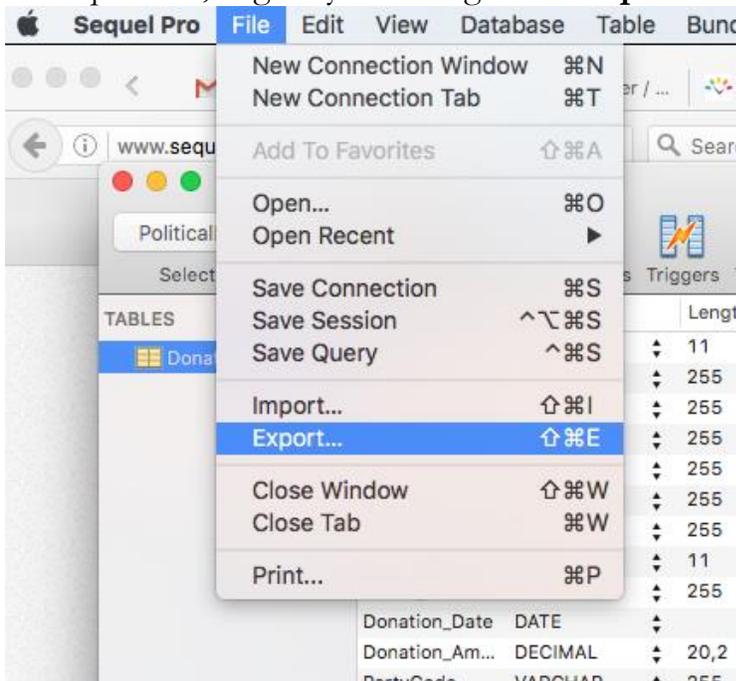
If you are using the Navicat front end, right click on the database name in the table of contents area, then choose Dump SQL File>Structure and Data.



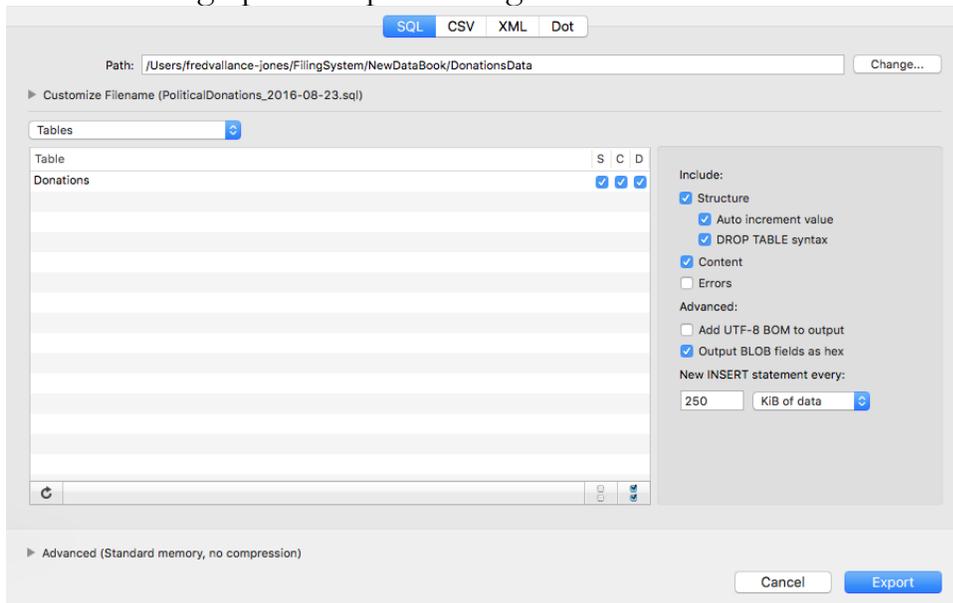
You will be asked where you would like to save the .sql file. Save it, and the file will be created. An SQL dump file contains the structure of all the tables, the required SQL statements to create them, and the data to be inserted.

Restoring the data is just as easy. From the same menu choose Execute SQL File. You can also back up individual tables in your database by exporting them to CSV files. Right click on the table name in the table of contents and choose Export Wizard. You can choose which fields to export, options for field and record delimiters, the character encoding to be used, and so on. Saved csv files can be reimported later.

In Sequel Pro, begin by choosing **File>Export**.



This will bring up the Export dialogue.



Here, you choose a name for the backup and, optionally, change options for the dump.

You can generally leave the options as is. If DROP TABLE Syntax is checked off, the dump will include instructions to delete any existing table with that name when the database is restored. If Content is left unchecked, only the structure of the tables will be included in the dump, so unless you just want a copy of the tables, make sure this is checked off.

Click Export to complete the dump. You can also export one or more tables to a CSV file in the same dialogue.

If you like, you can also run the mysqldump utility from the MySQL command line. You can find the complete instructions in the MySQL documentation at <http://dev.mysql.com/doc/refman/5.7/en/mysqldump.html>

A final option is to locate the MySQL data files on your hard drive, and manually copy them. The location of these varies by operating system. On Windows, as an example, the files are usually found in C:/ProgramData/MySQL/MySQLServer. The types of files stored will depend on the database engine chosen when the database was created. This is generally a more complicated method of making backups and is not recommended for those not familiar with working within the system folders of their computer.

As discussed in Chapter 5, you should always back up your entire hard drive, preferably to the cloud or an external hard drive.