Pedigree Publisher

and

Pedigree Cloud

Version 4.0

USER GUIDE

Foreword

Pedigree Cloud is a product of Wild Systems Pty Ltd ABN 85 065 845 927, incorporated in Australia.

Technical support for Pedigree Cloud is available to registered users for one year from the date your original order for Pedigree Cloud, or upgrade, is dispatched to you.

We are happy to provide technical support between 10:00am and 6:00pm, Monday to Friday and 10:00am to 4:00pm on Saturdays. However, we would ask that you please *read your manual* before calling us. As Wild Systems provides technical support free of charge to registered users we reserve the right to redefine that support at our own discretion, without prior notice.

For technical support or sales inquiries please contact Wild Systems Pty Ltd by phone, mail or Internet

e-mail:

Email: support@breedmate.com.
Web: www.breedmate.com
Tel: +61 2 9876 3926
Mail: PO Box 2395, Carlingford Court, NSW, 2118, AUSTRALIA

Pedigree Cloud has been priced at a fraction of similar products so that it is affordable for all breeders. Do not provide copies of this software and or registration number to others and do not use this software if you are not a licensed user.

Table of Contents

1 Introduction

This manual covers **Pedigree Publisher (PedPub), Pedigree Cloud, Pedigree Host and Pedigree Point (PedPoint). Pedigree Cloud (PedCloud)** is a superset of Pedigree Publisher, i.e. it does everything it does and more. Throughout this manual when we refer Pedigree Publisher we are also referring to Pedigree Cloud. If we refer to Pedigree Cloud then that feature only exists in Pedigree Cloud and not in Pedigree Publisher.

We provide regular updates for our programs and all their variants and these can be downloaded from our web site www.breedmate.com after logging in with a valid and current registration number. If your number has expired, you can get another year of upgrades and support at any time by purchasing the (usually) US$20 upgrade. To be informed of when new updates are released you should join our email list https://groups.io/g/breedmate.

Note the updates or upgrades do not require you to have any previous versions already installed. When an update is available can simply download the installation program and back it up to a USB Flash Drive or CDROM (desirable if you want to reinstall if your computer crashes for any reason).

The installer for our desktop software, PedCloud and PedPub, is a single file, usually with a name like InstallPedPub2.exe. When run it will automatically install Pedigree Cloud.

Pedigree Cloud and Pedigree Publisher 4.0 run under Microsoft Windows Win 10/11.

The following system requirements are recommended:

- Quad Pentium processor 4GHz
- 8 GB RAM
- 1TB hard disk
- 64bit version of Windows (32bit is NOT supported)
- 28” monitor with 1920x1080 resolution graphics card
- The **Pedigree Cloud/Publisher** program itself requires 5 MB of disk space and a typical database of 1500 records is about 180 KB in size. A database has a no practical limit on size.

1.1 Pedigree Publisher

PedPub is desktop pedigree software that runs on Windows PCs. In simple terms PedPub connects to an SQLite database file stored on your PC which contains pedigree and related information like contacts, shows, litters, health. It also has a form file with multiple forms in it that displays various reports like pedigrees. The database and the forms are completely user customizable.

With PedPub (as with most desktop pedigree software) it is not that easy to use when there are multiple users of the same data because copies of the database would have to be manually passed around and manually merged. This is a fairly time consuming and inaccurate activity.

1.2 Pedigree Cloud

PedCloud is a superset of PedPub, i.e. it does everything that PedPub does and more. **PedCloud solves the data sharing problem.** While it can optionally connect to an SQLite database on your PC, it can also connect to a MySQL database stored “in the cloud”, i.e. on a server somewhere on the internet. The big difference here is that you can **have multiple users connected at the same time, viewing and, if allowed, modifying that same data**. This is useful for groups maintaining registries, genetic databases and breed club data.

All viewing and modification of data occurs on the MySQL database and all the other users you have permitted to connect will see the exact same data as you – all without the need for any manual copying of data.

Pedigree Cloud is supplied only as a download. You will also require your registration number (located on your download instructions).

1.3 Pedigree Point

This is software that is written in PHP and installs on a website that also has a MySQL database. It allows visitors to your website to search for records that match search criteria like name, registration number etc and returns search results. Clicking on a search result shows reports like pedigrees, reverse pedigrees, sibling reports etc.

Read more about this product here: https://www.pedigreepoint.com/ . This also links to a sample page that shows how PedPoint works.

1.4 Pedigree Host

This isn't actually software. It is a service where we host your database on our cloud server. The service is available for PedPub or PedCloud. It is not available for PedPoint.

1.5 Summary of products

Here is a simple summary of the products we have mentioned.

	Pedigree Publisher	**Pedigree Cloud**	**Pedigree Point**
Where is it installed?	It is installed on your Windows PC.	It is installed on your Windows PC.	It is installed on your website.
What database can it connect to?	It can connect to an SQLite .db file located on your PC or to a PedHost database in the cloud.	It can connect to an SQLite .db file located on your PC or to a PedHost database in the cloud. In addition it can connect to a MySQL database, typically the same one that PedPoint is connected to.	It connects only to a MySQL database located on the website.
Can I share data with others	You can share copies of your database by emailing the .db file to someone. You can share a live database where everyone sees the same data by connecting to PedHost.	You can share copies of your database by emailing the .db file to someone. You can share a live database where everyone sees the same data by connecting to PedHost. In addition if you connect to your MySQL database then that can be shared live with others.	Visitors to your website will see the same data as you can from PedCloud. You do have the option of hiding some fields or making some records private.
Can I edit, add or delete data	Yes	Yes	No. PedPoint is only for viewing data.

1.6 Selecting the right product

Situation	**Solution**
I am the only person accessing my database and I do so only from my PC.	Use PedPub.
I am the only one accessing my database but I may do	Use PedPub with PedHost.

so from multiple computers, say home and work.	
I want to have a website where visitors can search for and see pedigrees and other reports.	Use PedPoint installed on your website and use PedCloud to connect to the same MySQL database that PedPoint uses.
Myself and some club members want to maintain a breed database and have that accessible to the public or just to club members.	Use PedPoint installed on your website and use PedCloud to connect to the same MySQL database that PedPoint uses. Each club member who is modifying the database needs to have their own copy of PedCloud.

2 Installation

To install the software simply perform the following steps in the order listed:

- Download the installer from www.breedmate.com then double click the installer to run it. The installer file is called either "InstallPedCloud4.exe" or "InstallPedPub4.exe".

The installer will present you with the license terms and conditions. If you agree with these then click on the appropriate button. For purposes of **license monitoring**, the Software may send some information to a central web site during registration. The information sent contains only the machine identification, the user's registration number and the product version.

- After installation, when you first run Pedigree Cloud, you will be asked for a registration number. This number was supplied with your download instructions. Note the registration number and store it in a safe place as it will be required should you require any upgrades or reinstallation. If you do lose it you can email us at support@breedmate.com. Note we will need to verify your identity so you need to supply your full name, address, phone and approximate date of purchase. Note if you are past your support period we may require you to purchase the upgrade before we supply your registration number.

- Technical support is for a period of one year from the date that your original order or upgrade order is dispatched. This also includes free upgrades. You can optionally purchase an additional two years of support and upgrades at the time of your purchase.

The installer will install the Pedigree Cloud program files into a directory called "C:\Program Files (x86)\PedCloud4.

The data files, form files, user manuals and initialization files are all stored in a **different** folder called "C:\Users\Public\Documents\Breedmate". The reason for splitting the files between these two folders is that any files in the C:\Program Files folder are protected and cannot be modified whereas we obviously need to be able to modify data and form files etc.

> DO NOT MOVE the files in the "Public Document\Breedmate" folder or the folder itself. Breedmate relies on this folder being in that location. IF you do however move those files or the folder, then what will happen is you will be asked for your registration number each time you start Breedmate and it will forget all your settings, such as last opened file.

2.1 Upgrading from Pedigree Explorer

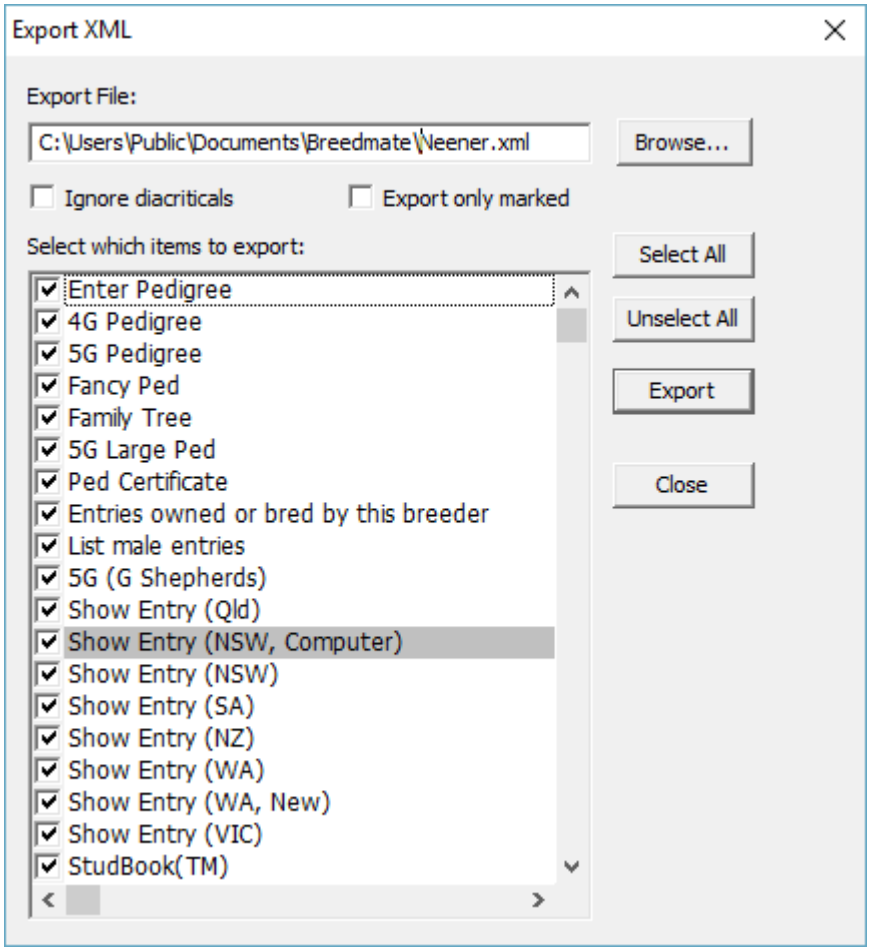
If you are upgrading please note the following:

- A database produced by Versions 1.0 to 3.0 inclusive of Breedmate, has a BMF extension. It cannot be read by PedCloud. You will need to send the BMF files to us for conversion. Email to support@breedmate.com. If the file is large you could try zipping it. This can be done in File Explorer by right clicking on the file and selecting **Send To-Compressed Zipped Folder**. If the file is still too large then you can send by using a service like www.wetransfer.com. Note we do not accept files sent by DropBox!

- Pedigree Explorer (PedEx) data files have a .BMX file extension. To read them just use the FILE-Open Datababase command. Because PedCloud database files have a .DB extension, PedCloud will automatically convert the .BMX file to a .DB file, e.g. if you had a PedEx file called FRED.BMX then after opening it in PedCloud you would still have that file but you would have an additional file FRED.DB which PedCloud created and will use from this point on. Note that the .BMX file is never changed. By default the .DB file is placed in the "C:\Users\Public Documents\Breedmate" folder, so please note that the converted .DB file may not be in the same folder as your .BMX file.

- PedEx cannot read PedCloud .DB files. You can however get it back from PedCloud format by using the TOOLS-Export to Breedmate .MAX file. Breedmate can read .MAX files and will convert them back to BMX files.
- All photo files must be moved to a sub-folder called Photos located in the same folder as the .DB database file.
- When starting PedPub we recommend you do so from a link to the PedPub4.exe file.

In respect of form files, it's definitely best if you use the forms supplied with PedCloud but if you also have a custom form file and you really want to use it then PedCloud can read this as well. First start PedEx and select any form, then use TOOLS-Export Form XML. A dialog appears as below:



Select any file name with a .XML extension and click Export. Exit PedEx then start PedCloud and use FILE-Open Form File. PedCloud will autoomatically copy and convert that file to a .FOX form file. It is recommended that while converting the .XML file that you have a database open that has the same fields as the original PedEx file because it needs to convert the field indexes (numbers) in the XML form file to field names as used in a PedCloud FOX file.

3 Getting Started

This section describes how to get started with Pedigree Cloud (PedCloud).

3.1 Starting Pedigree Cloud

To run PedCloud just double click on the link on your desktop as shown below.

When PedCloud starts it will automatically open the last file or MySQL connection you accessed.

3.2 Registering

When you first start Pedigree Cloud you will be asked to enter a registration number. Note - if you are upgrading you will need a new registration number.

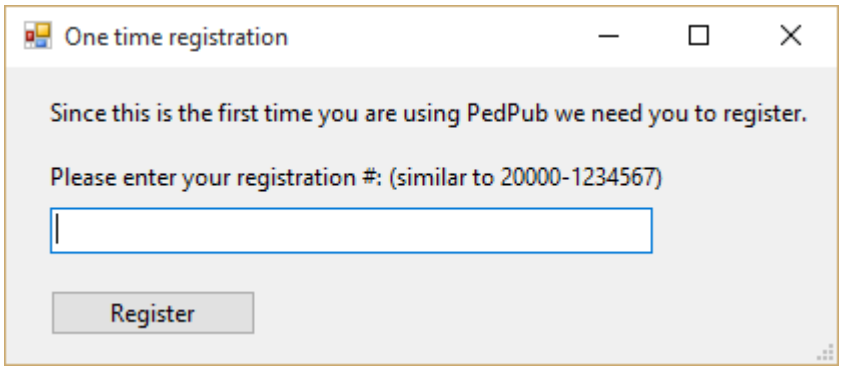


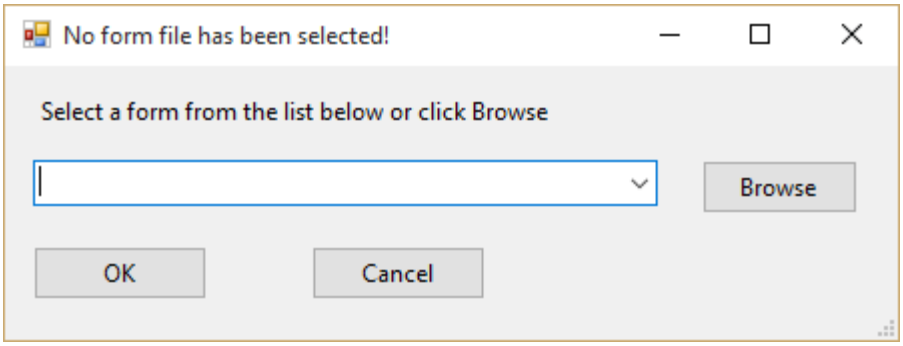
Figure 3.2

Enter the registration number including the dash (but no spaces) and click on the Register button. Registration numbers look like 12345-7890123, i.e. two numbers separated by a dash (minus sign).

> You can **adjust the size and position** of PedCloud's window. To move the window, click in the title bar with the left mouse button and, keeping it pressed, drag the window to the desired position and then release the button. To resize, position the cursor over the bottom corner until it changes to a double headed arrow, then click the left mouse button and drag.

Because this is the first time you are using Pedigree Cloud, you will be asked what type sample database and forms you wish to use. The first two options are for non-US users, the last two are for US. The main difference between the forms is that the US and Canada use US Letter paper size whereas moat other countries use A4.

Figure 3.3



Pedigree Cloud will now display a spreadsheet style view showing a sample database file located on your PC in the "C:\Users\Public\Documents\Breedmate" folder. If the file "DogSample Data.db" (or "CatSampleData.db") is not already open then open it via **FILE-Open database**.

Note: You can also drag and drop a file from Windows File Explorer onto the Pedigree Cloud application and it will open that file if its one of the following: ".DB", ".BMX", ".FOX".

The normal downloadable installer for Breedmate does not install the user manual BUT when you first access these via the Help menu, PedCloud will offer to download these for you. We strongly recommend you do this rather than manually downloading from our web site. If you do manually download then you may need to unblock the files before using them as described below.

Most of the discussion that follows will use the sample database. If you want to start your own database now, use the **FILE-Create Database** command and under "Select type" select either Dog, Cat or whatever is appropriate from the popup menu or select Browse… to open a dialog to select the template file.

3.3 Screen Layout

When PedCloud starts you get a screen as shown below. The main elements of the screen are:

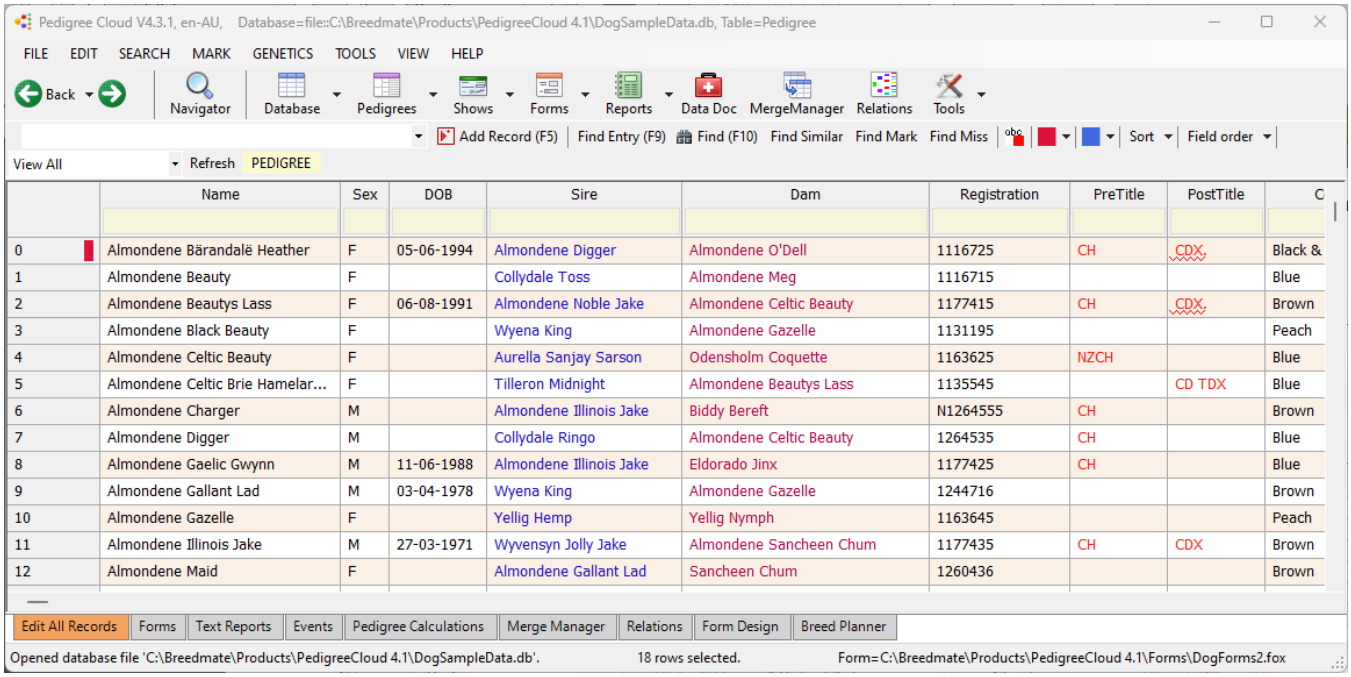
- Title is at the very top of the screen. It shows you the full file path of the currently selected database.
- Menu bar. This has items like FILE, EDIT, SEARCH, MARK, GENETICS, TOOLS, VIEW, HELP. These menu headings will always remain there but the list of menus available when you click on the heading will change depending on what view you are in.
- Main Toolbar. This has the large left and right green arrows at the left. They work just like in a browser by selecting records and forms you have previously visited. It also has buttons for various tools like Database, Pedigree, Shows, Forms etc.
- Grid toolbar – because we are in the Grid view its toolbar is displayed. It has buttons like Add Record (F5) and Find (F10) – note the F5 etc refers to the keyboard short cut, in other words pressing the F5 key is the same as clicking on the Add Record button.
- The View. All views appear in this area. The currently shown view is the Grid view also called "Edit All Records".
- Tabs. These are second from the bottom and allow selecting different views.
- Status bar is the very bottom. It displays messages and a progress bar for long running tasks like loading databases and a Cancel button.

The Toolbar at the top of the screen lists all your tools. If you click the Database drop down button (has a small downward arrow on it), all the tables in your database will be listed. Normally you would have maybe 15 tables. They include tables like Pedigree for storing pedigree information like Name, Sire, Dam, DOB etc.

Clicking on the Pedigree button will list all Pedigree forms like 4G Pedigree or Pedigree Chart. Clicking on one of these forms will display the currently selected entry in an that pedigree

The main view is the “Grid View” as shown below – it’s useful as it allows you to see data on many records at the same time.

Figure 3.4



	Name	Sex	DOB	Sire	Dam	Registration	PreTitle	PostTitle	C
0	Almondene Bärandalë Heather	F	05-06-1994	Almondene Digger	Almondene O'Dell	1116725	CH	CDX	Black &
1	Almondene Beauty	F		Collydale Toss	Almondene Meg	1116715			Blue
2	Almondene Beautys Lass	F	06-08-1991	Almondene Noble Jake	Almondene Celtic Beauty	1177415	CH	CDX	Brown
3	Almondene Black Beauty	F		Wyena King	Almondene Gazelle	1131195			Peach
4	Almondene Celtic Beauty	F		Aurella Sanjay Sarson	Odensholm Coquette	1163625	NZCH		Blue
5	Almondene Celtic Brie Hamelar...	F		Tilleron Midnight	Almondene Beautys Lass	1135545		CD TDX	Blue
6	Almondene Charger	M		Almondene Illinois Jake	Biddy Bereft	N1264555	CH		Brown
7	Almondene Digger	M		Collydale Ringo	Almondene Celtic Beauty	1264535	CH		Blue
8	Almondene Gaelic Gwynn	M	11-06-1988	Almondene Illinois Jake	Eldorado Jinx	1177425	CH		Blue
9	Almondene Gallant Lad	M	03-04-1978	Wyena King	Almondene Gazelle	1244716			Brown
10	Almondene Gazelle	F		Yellig Hemp	Yellig Nymph	1163645			Peach
11	Almondene Illinois Jake	M	27-03-1971	Wyvensyn Jolly Jake	Almondene Sancheen Chum	1177435	CH	CDX	Brown
12	Almondene Maid	F		Almondene Gallant Lad	Sancheen Chum	1260436			Brown

Pedigree Cloud has many Views or ways of looking at your data and reports. The views it does have are listed in the Tabs at the bottom of the screen and they are:

- Grid view (Edit All Records) – this is the main view you will use to edit data. It shows one record per row. Each record has many columns or “fields” like Name, Sex, DOB, Sire, Dam, Owner. In the screen shot above we can see the record for “Abbotsleigh Nimrod” which has Sex M and Sire Abbotsleigh Kossak. Not all columns are visisble at one time but you can scroll horizontally to see them all.
  Also not records are visible at one time bu the righ hand scrollbar can be used to see them all.
  To edit a field just click on it, click in the Grid toolbar combobox then hit Enter. The cell at the top of each column contains a “filter box”. By typing into that box, then hit Enter, the records displayed will be filtered to only show records where that field in the record contains the text entered in the filter box.

- Forms view. This shows all the forms like 4G Pedigree, Show Entries etc. To display a record in a form first select a record by clicking on it. It will be shown with a light yellow background and the selected cell in that record with a blue background. Then select the form from the approriate drop down such as Pedigree.

- Text Reports – displays text reports. These are listed under the Reports button on the main toolbar.

- Events – these show background information that may be useful when performing some tasks.

- Pedigree Calculations – this will calculate the COI etc for every record in the database.

- MergeManager – allows you to see your current data plus the data from any second database. Any matching records are grouped and any differences highlighted. This is usefull for interactively combining data from two databases.

- Relations – view the sire, dam, siblings and offspring of the subject.

- Form Design – for modifying or creating a form.

In the following sections we will look at performing basic tasks.

3.4 Viewing a Pedigree

Just double click on any record in the Grid view, or just select a record then select a pedigree form by clicking on the large Pedigrees button drop down (small arrow on the right of the button). 

3.5 Adding/Modifying Data

After first starting Pedigree Cloud, the Grid View will appear. Modify data as follows:

- Select a cell – just click on it or use one of the keyboard arrow keys
- Edit a cell by just typing, then hit Enter. Note: to create a new record, type the name then hit F5 or click the “Add Record” button.
- Entering a sire or dam – click on the drop down list to select from the available records. As you type the list will be filtered to show matching items.
- Delete a cell - hit the Delete key (or right click, popup menu, Delete).
- To select a range of cells, click on the first cell with the mouse left button, then while holding down the button down drag the mouse down to the bottom right hand corner of the range. Alternatively click on the first cell, then while pressing SHIFT click on the bottom right cell.
- Delete a record - select them and using the **EDIT-Delete Selected Records** command or use the F7 key.
- To add a record, start typing then hit F5 or click on the **Add Record** button.

If you don’t like looking at a grid and you just want to concentrate on one entry then click on the large **Navigator** button on the Main toolbar and use the **Edit** tab.

It will show one record only and with the fields in the same order as they are in Grid view

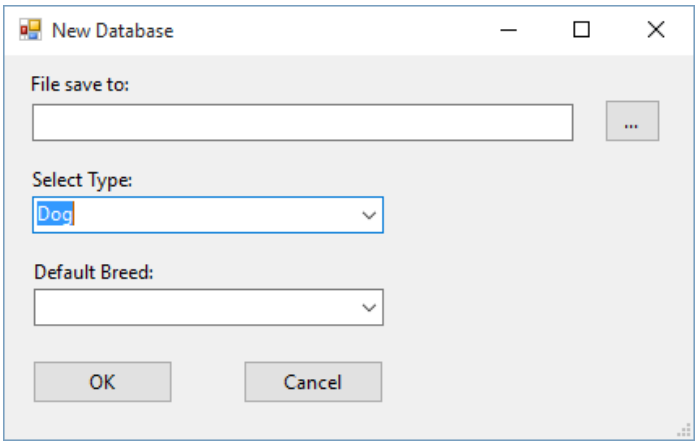
3.6 Switching Between Database and Forms

The fast way to switch between views is to click on the large Database button or Pedigree button which will switch between the previously selected table and previously selected form.

Also you can use the toolbar back arrow to go back to the previous view.

3.7 Starting Your Own Database

Click on **FILE-Create Database**. A dialog appears which will list all of the “templates” available from which to construct your database. Usually it will list Dog and Cat. Select whichever item is appropriate.



Next select where to save the file and what to call it by clicking the […] button. The preferred location for you files is in C:\Users\Public\Documents\Breedmate

You now have a new database that you can enter records into. When you are ready you can save this database using the **FILE-Save Database** command – you will be prompted for a file name.

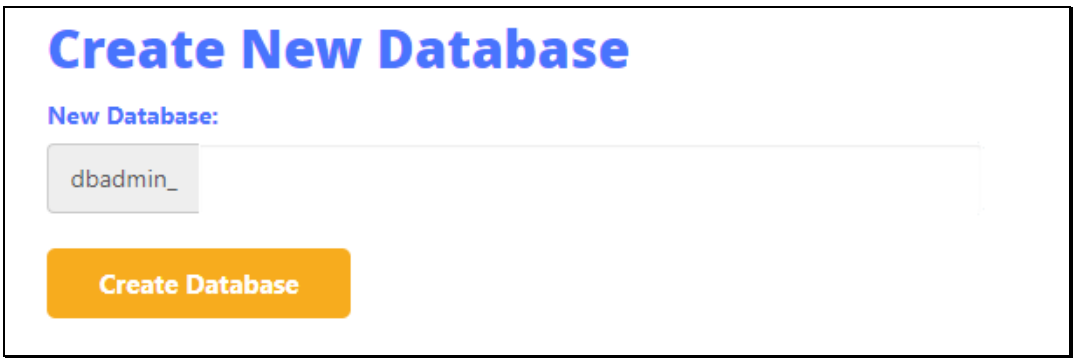
3.8 Creating a MySQL database

Before you can connect to a MySQL database you will have to create one if you have not done so already.

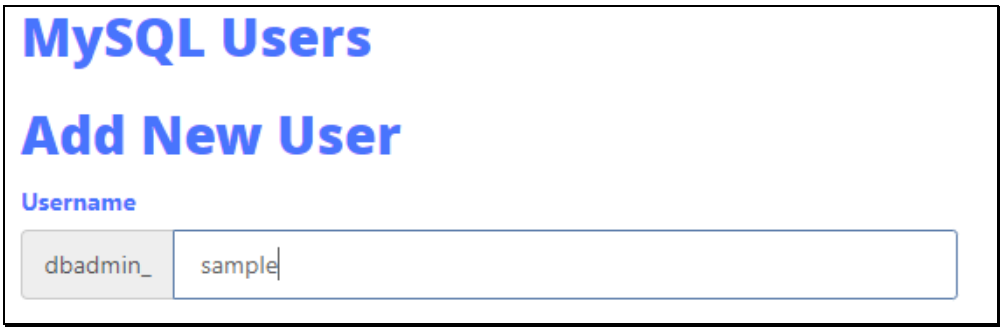
Normally if you have a website hosted, it comes with the option of creating a database so the instructions that follow are for that situation.

First login to your control panel (cpanel) using the account an password your web hoster has given you.

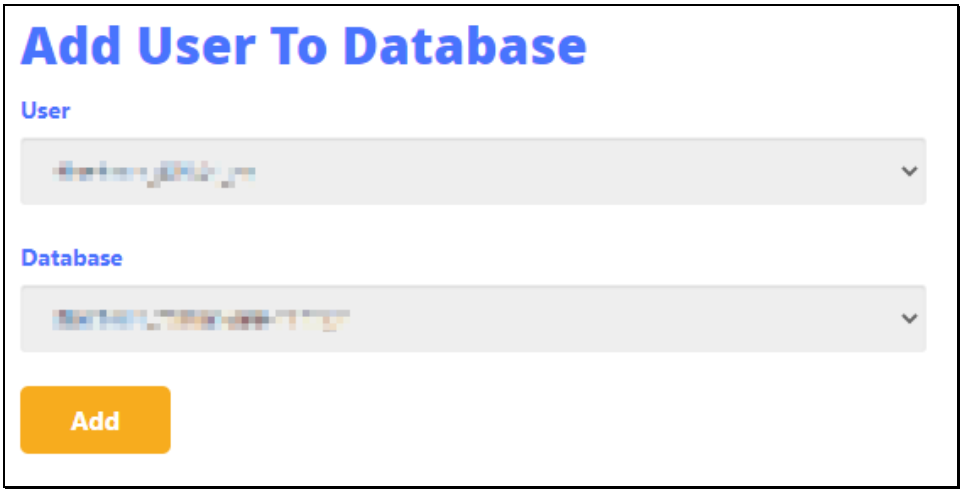
Click on "MySQL Databases". Under "**Create New Database**" enter a name and click "Create Database". See below for sample screenshot:



Next **create a new user** as shown in the screenshot below and set its password:



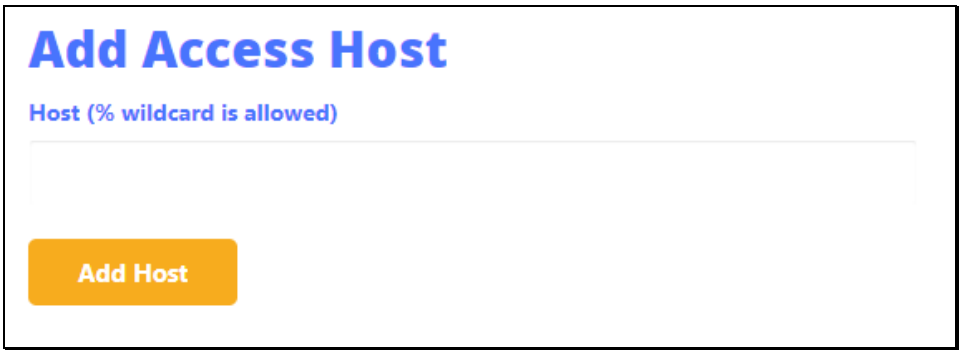
Next **add that user to the database you created.**



When you click "Add", a different page will be displayed where you can set the privileges for that account. If you are unsure of what privileges to enable, click "All Privileges".

Now return to the cPanel home page and click "**Remote MySQL**". Note that most MySQL databases can only be accessed from a restricted list of IP Address. If you are not on that list you will not be able to access the MySQL database from your PC. You will need to find out what your IP address and add it to the list by typing or pasting it in and click "Add Host".

If you do not have a static IP address (some internet providers charge extra for this) then another option for connecting is to use the "Connector" plugin. Contact support@breedmate.com for details.

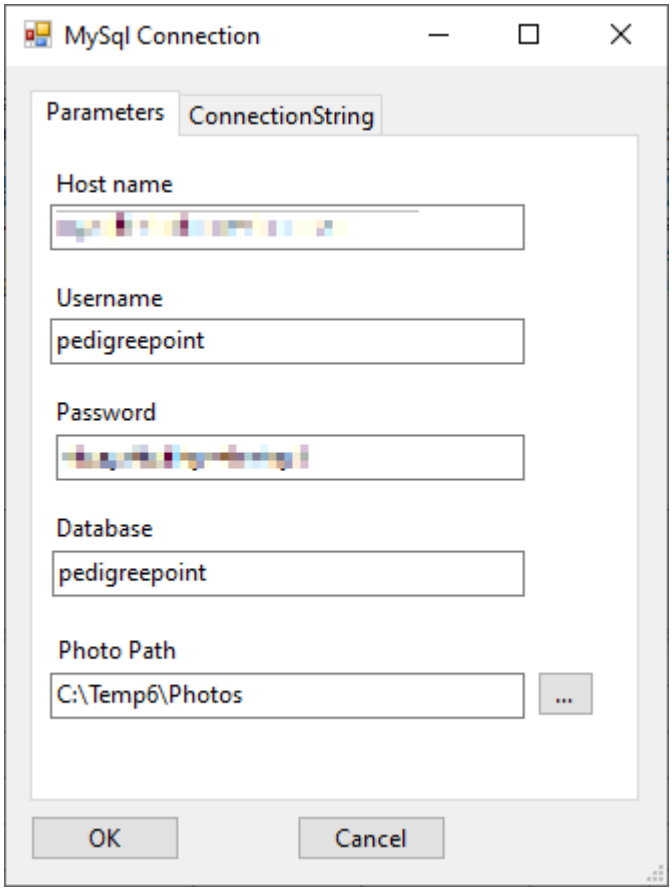


3.9 Connecting to a MySQL database

When you have a hosted website, it normally comes with one or more MySQL databases. If you don't already have a MySQL database you will need to create one and make a note of the URL, database name, account and password.

Next start PedCloud and use the FILE-Manage Connections menu command. It will open a dialog box as below (passwords have been pixelated):

Click "Add MySQL" and another dialog box appears as below. If you were supplied with a connection string, then click on the ConnectionString tab in the dialog below and paste it in, then switch back to the Parameters view to add your specific "Photo Path".



If you are using the Parameters, rather than the ConnectionString tab, enter your values for host name (URL), username (account) and password and the location of your photos folder, then click OK, then double click on the connection which appears in the previous “Cloud Connection” dialog.

At this point there will be no tables in the database and no data. Next use the “**TOOLS-Import PedPub into MySQL**” command and select a .DB PedPub file. This process can take some time, depending on how large the database is. Once complete you should be able to see your PedPub data in MySQL. From this point on you should use the MySQL connection rather than the .DB file. If you close PedCloud it will remember the last opened connection or file and it will automatically reconnect when you restart it.

4 Upgrading from Pedigree Explorer

It is generally enough to do the following:

- If your database ends in .BMF then you will need to email it to support@breedmate.com for conversion. If it ends in .BMX then PedCloud will be able to convert it.
- Start PedCloud then use "**FILE-Open Database**" to open the BMX file(s). The BMX file will be converted and saved as a .DB file which is file format used by PedCloud. If you don't know where your old .BMX files are then you could look in the "C:\Program Files (x86)\PedX64" folder or failing that do a search using Windows File Explorer and look for *.BMX.
- If for some reason the .BMX file is damaged, PedCloud will not be able to open it, however you may still be able to open it if you use the "**TOOLS-Open damaged .BMX file**".
- If you have customized any forms then see Section 4.1. If your database uses the Choices table then see Section 4.2.
- PedCloud treats names as case sensitive whereas PedEx is case insensitive. So in PedEx the sire "Fred" would match "fred" or "FRED" BUT in PedCloud it won't match. There are also some other problems with PedEx data so the first thing you should do is run Data Doctor (large toolbar button) with this option selected "Remove extra spaces and illegals". Then run it again with "Case sensitive names". This will list all names which are case insensitive duplicates – the duplicates must be removed. Then run the DataDoc command again to fix up all the links.

4.1 Customised forms

If you have customised any forms then do the following:

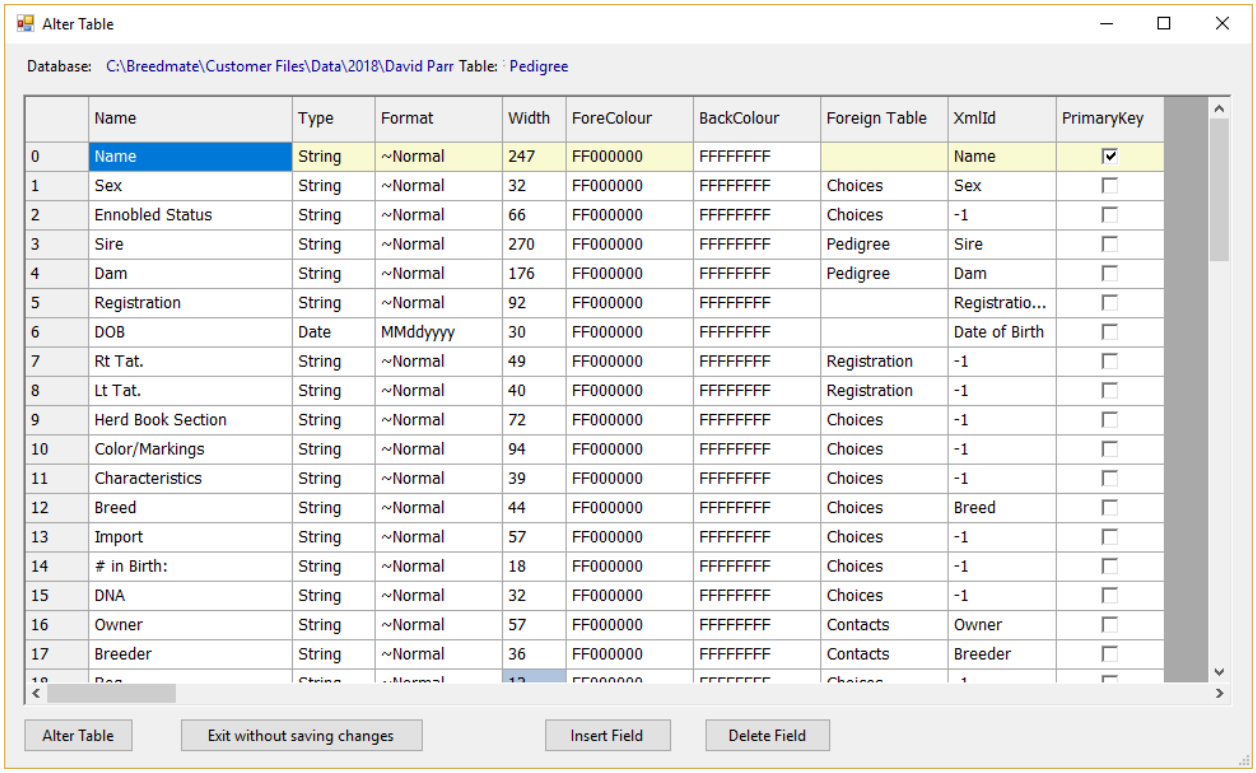
- PedEx form files end in .FMX. First open the file in PedEx, view any form then use **TOOLS-Export Form XML**. In the dialog, select an XML file name and click Export. This XML file will be used in the next step.
- Start PedCloud and make sure you have your database open. Then use **FILE-Open form file** to open the XML file. The reason for having your database file open during form conversion is that PedEx uses field indexes whereas PedCloud uses field names so during conversion the indexes will be turned into names. For example the Sex field in a PedEx form is listed as "1" and this will be converted to "Sex".
- The file will be converted and saved as a .FOX file and the original .XML file will be unchanged.

4.2 Choices table

If your Pedigree or other table has a link to the Choices table then you will need to manually fix this up. Basically in very old PedEx databases most "lookups", i.e. list of colors, titles etc were stored in the Choices in separate columns. This led to a lot of empty space. The screen shot below shows part of a typical Choices table.

	Color	Ear Type	Horn Information	Sex	Breed	Year	Status	Bred By	Temperament
0	Black	Gopher	Dehorned	B	Pygora		Sold-Meat	AI	Night Breeder
1	Black	ELf	Horn	W		N/A	Died	Natural	Gentle
2	Black								
3	Black Agouti	Erect	Polled	D	Oberhasli		Sold-Foundation	Lap	Wild
4	Brown Agouti	Airplane	Disbudded		Pygmy		Sold-Breeder	Unk.	Unpredictable
5	Brown Caramel	Vertical Fold	Unk.		Oberhasli		Died		Unk.
6	Brown Head White Body	Horizontal Fold					Breeding		
7	Caramel	Breed Correct					Tank		
8	Chocolate W/Small W...	Unk.							
9	Co								

The Pedigree table that used this had the following design:



	Name	Type	Format	Width	ForeColour	BackColour	Foreign Table	XmlId	PrimaryKey
0	Name	String	~Normal	247	FF000000	FFFFFFFF		Name	☑
1	Sex	String	~Normal	32	FF000000	FFFFFFFF	Choices	Sex	☐
2	Ennobled Status	String	~Normal	66	FF000000	FFFFFFFF	Choices	-1	☐
3	Sire	String	~Normal	270	FF000000	FFFFFFFF	Pedigree	Sire	☐
4	Dam	String	~Normal	176	FF000000	FFFFFFFF	Pedigree	Dam	☐
5	Registration	String	~Normal	92	FF000000	FFFFFFFF		Registratio...	☐
6	DOB	Date	MMddyyyy	30	FF000000	FFFFFFFF		Date of Birth	☐
7	Rt Tat.	String	~Normal	49	FF000000	FFFFFFFF	Registration	-1	☐
8	Lt Tat.	String	~Normal	40	FF000000	FFFFFFFF	Registration	-1	☐
9	Herd Book Section	String	~Normal	72	FF000000	FFFFFFFF	Choices	-1	☐
10	Color/Markings	String	~Normal	94	FF000000	FFFFFFFF	Choices	-1	☐
11	Characteristics	String	~Normal	39	FF000000	FFFFFFFF	Choices	-1	☐
12	Breed	String	~Normal	44	FF000000	FFFFFFFF	Choices	Breed	☐
13	Import	String	~Normal	57	FF000000	FFFFFFFF	Choices	-1	☐
14	# in Birth:	String	~Normal	18	FF000000	FFFFFFFF	Choices	-1	☐
15	DNA	String	~Normal	32	FF000000	FFFFFFFF	Choices	-1	☐
16	Owner	String	~Normal	57	FF000000	FFFFFFFF	Contacts	Owner	☐
17	Breeder	String	~Normal	36	FF000000	FFFFFFFF	Contacts	Breeder	☐

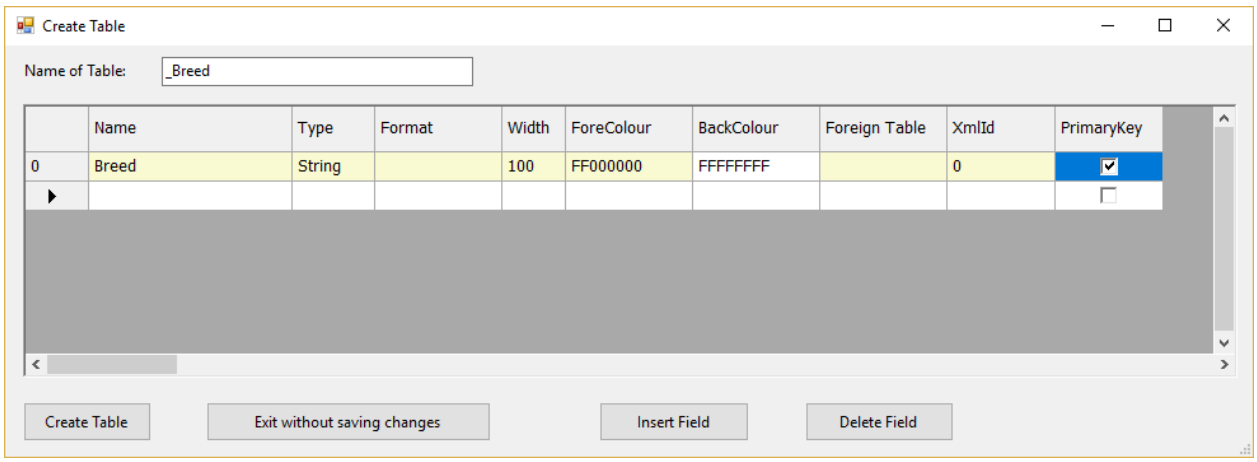
Notice how many of the fields have a “Foreign Table” of Choices.

Here are the steps that need to be taken to fix up just one field that uses Choices as its Foreign Table.

Rather than multiple fields all using the one Choices table for lookups, those fields should each have their own lookup table. One quick way to do this is use the **TOOLS-Add feature-Add lookup table to this field**. If you were to use this command on say the PreTitle field, it would create a table called _PreTitle and it would link the PreTitle field to that table.

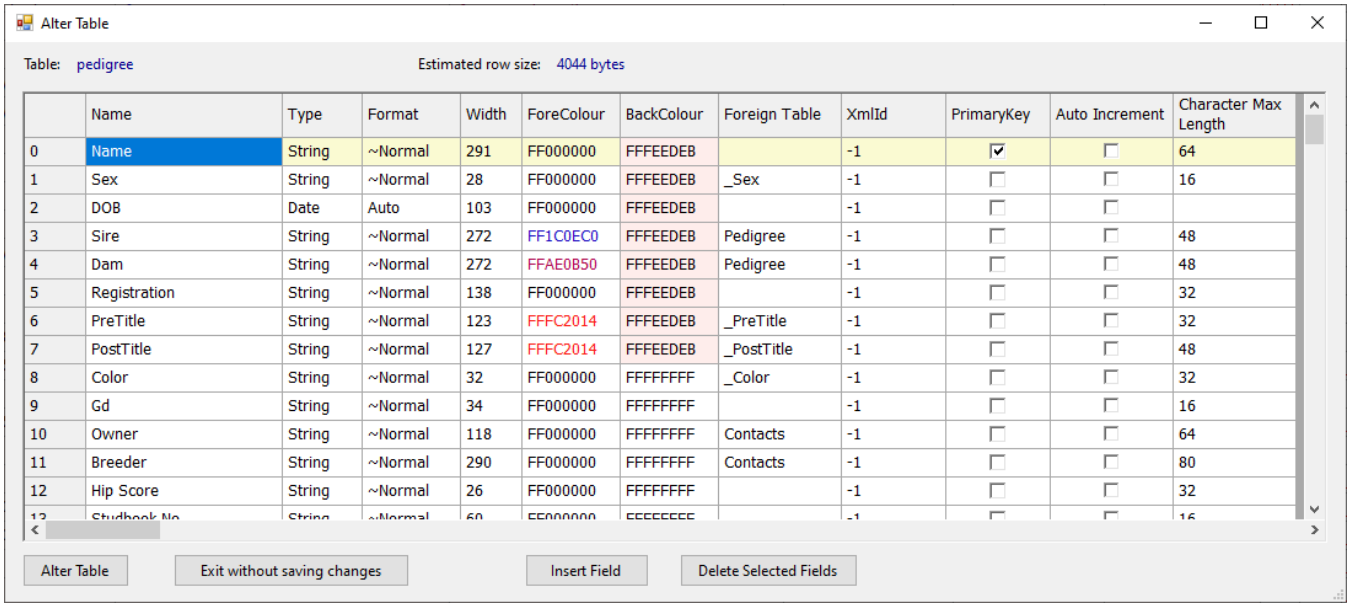
Alternatively if you wanted to manually create a lookup table use the following instructions.

Let’s say the field name is “Breed”. First create a table using the **TOOLS-Create Table** menu command and call it _Breed with one column called Breed and make sure that it is a type string and has Primary Key ticked. Note the actual name of the table or field is not important but we suggest that all “lookup” tables start with an underscore.



	Name	Type	Format	Width	ForeColour	BackColour	Foreign Table	XmlId	PrimaryKey
0	Breed	String		100	FF000000	FFFFFFFF		0	☑
▶									☐

Next go back to the Pedigree table and use **TOOLS-Alter Table**. In the Breed field change the Foreign Table to _Breed as shown below.



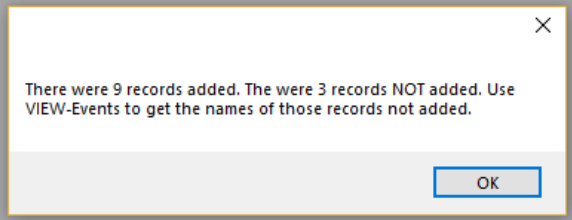
	Name	Type	Format	Width	ForeColour	BackColour	Foreign Table	XmlId	PrimaryKey	Auto Increment	Character Max Length
0	Name	String	~Normal	291	FF000000	FFFEEDEB		-1	☑	☐	64
1	Sex	String	~Normal	28	FF000000	FFFEEDEB	_Sex	-1	☐	☐	16
2	DOB	Date	Auto	103	FF000000	FFFEEDEB		-1	☐	☐	
3	Sire	String	~Normal	272	FF1C0EC0	FFFEEDEB	Pedigree	-1	☐	☐	48
4	Dam	String	~Normal	272	FFAE0B50	FFFEEDEB	Pedigree	-1	☐	☐	48
5	Registration	String	~Normal	138	FF000000	FFFEEDEB		-1	☐	☐	32
6	PreTitle	String	~Normal	123	FFFC2014	FFFEEDEB	_PreTitle	-1	☐	☐	32
7	PostTitle	String	~Normal	127	FFFC2014	FFFEEDEB	_PostTitle	-1	☐	☐	48
8	Color	String	~Normal	32	FF000000	FFFFFFFF	_Color	-1	☐	☐	32
9	Gd	String	~Normal	34	FF000000	FFFFFFFF		-1	☐	☐	16
10	Owner	String	~Normal	118	FF000000	FFFFFFFF	Contacts	-1	☐	☐	64
11	Breeder	String	~Normal	290	FF000000	FFFFFFFF	Contacts	-1	☐	☐	80
12	Hip Score	String	~Normal	26	FF000000	FFFFFFFF		-1	☐	☐	32

So we now have a new lookup table created and linked to the Breed field in the Pedigree table. The last step is to transfer the data in the Choices table to the new table. SO switch to the Choices table and click on the Breed column and use Ctrl+C to copy just that column as shown below.

	Color	Ear Type	Horn Information	Sex	Breed
	Black	Gopher	Dehorned	B	Pygora
	Black	ELf	Horn	W	
	Black				
	Black Agouti	Erect	Polled	D	Oberhasli
	Brown Agouti	Airplane	Disbudded		Pygmy
	Brown Caramel	Vertical Fold	Unk.		Oberhasli
	Brown Head White Body	Horizontal Fold			None
	Caramel	Breed Correct			Nubian
	Chocolate W/Small W...	Unk.			
	Co				Nubian
	Corr				Toggenburg
	Correct				La Mancha
	Correct Brown Spots o...				Saanen
	Correct Re-Tattooed				Alpine
	Correct Spots on Back				Alpine
	Correct Spotted Neck				

Switch to the _Breed table and use EDIT-Insert Records and you should see the following.

	Breed
0	Alpine
1	La Mancha
2	None
3	Nubian
4	Oberhasli
5	Pygmy
6	Pygora
7	Saanen
8	Toggenburg



Note that the old Choices table often had repeats and these are automatically removed during Insert-records.

5 Overview

All data is kept in database files (or MySQL databases), one file or connection per breed, e.g. “golden.db” or “borders.db”. The data can be viewed directly in the **Grid view (Edit All Records)** - it appears as a spreadsheet allowing quick scrolling through data.

In addition there is a separate **Forms view** which displays your data according to templates in a forms file. There are a number of form files, each specific to the kind of breeding that you do, e.g. “DogForms2.fox”, “CatForms2.fox”. Within each form file there are many forms, e.g. “4G Pedigree”, “Family Tree”.

5.1 How To

Using Pedigree Cloud is easy if you remember these hints:

- Enter your pedigree, contacts, show results etc data in the Grid View - it’s just like a spreadsheet with one row for each entry.
- It is not sufficient to just have an entry appear in a sire or dam field, you must enter a record for every ancestor if you wish that ancestor to appear in a pedigree . Note you only have to enter an ancestor once, no matter how many different pedigrees it appears in.
- Pedigree Cloud builds up pedigrees by matching the name in a sire or dam field with the name field of another record. If the names don’t match then your ancestors will not appear in the pedigree. Note that Pedigree Explorer did case insensitive matching so “Fred” would match “fred” or “FRED” but in PedCloud the names must match exactly. BTW one way of ensuring this is to simply copy a name from a Name field and paste into a Sire or Dam field.
- Hit F5 to add a record - the name of the record will be the name in the edit box at the time you hit F5. If the name already exists it will simply add a blank record in which case just type the name of the new entry and hit Enter.
- Hit Enter after adding each field - this will also move you on to the next field.

5.2 Your Data

All your pedigree data will be stored in Pedigree Cloud database files (these files end with “.db”) and you would normally keep one file for each breed, e.g. if you had Border Collies and Siamese cats then you would keep your Border Collie data in a file called “BORDERS.db” and keep your Siamese pedigree data in a separate file called “SIAMESE.db”.

The database files actually store much more than just pedigrees. The files are internally split into “tables” and each table contains different types of information. The tables in the “Dog Database” are listed below:

- **Pedigree** – this contains the names of the various entries in alphabetic order and each entry contains such data as sire, dam, date of birth, sex etc.
- **Contacts** – this contains details about the owner’s or breeder’s name, address, phone, membership number, club etc.
- **Shows** – this contains information related to show entries and show results. Normally the show entry details are filled in first and then used to produce a Show Entry. After the show, the results would be added to the relevant fields, e.g. 1st, 2nd 3rd, Challenge points. A brief list of the fields provided is as follows: date, name (of the entry), club, show, judge, grading (result), class entered, 1st place, 2nd place, 3rd place, challenge.
- **Litters** – this contains information common to a given litter. The fields provided are a unique litter name, total born, number culled / died, number fostered.
- **Medical Table** - contains medical / worming events. Basically records the animal, the date, condition, result, vet (if applicable).

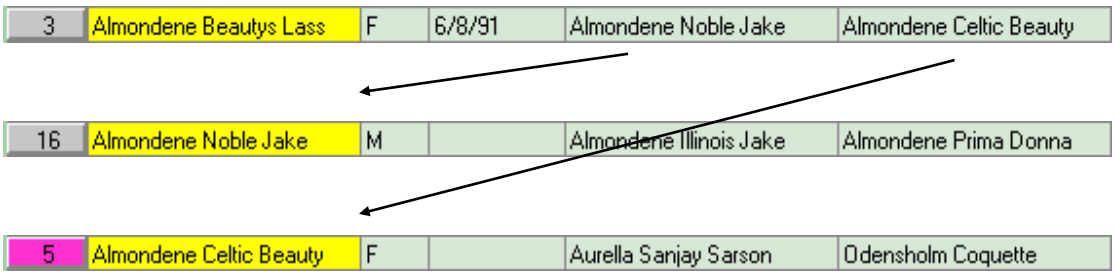
- **Heats / Mates** – used for recording the heats and, if applicable, mates.
- **Studbook** – used to focus on specific entries. It contains details such as head, bone, conformation and photo.
- **Hips / Elbows** – used for very detailed information.
- **Choices** – used to store possible values for various fields, eg lists of show titles, colors, countries. This is a really fast way of entering commonly used values in any field by using the Navigator, eg Owner, Breeder, Sire, Dam, Show Titles, Obedience Titles, Colors.
- **Ownership** – keep a record of puppy sales / leases etc.
- **Puppy Records** – keep records on the individual pup's details such as weekly weight gain, markings, time of birth, order of birth
- **Reminders –** records the date, name, duration and description of reminders
- **Expenses**
- **Breed Survey** – very detailed information as used by some breeds such as German Shepherds
- **Vaccinations** – record all your vaccination information here. It has fields like what type of vaccine, the lot#, injection site, reaction

5.3 How PedCloud Makes a Pedigree

It's important to understand how PedCloud actually constructs a pedigree certificate from your data.

Looking at the pedigree for "Almondene Beautys Lass" below, notice that the sire is "Almondene Noble Jake". The dam is not visible in that screen shot but it is "Almondene Celtic Beauty". Notice also that the database view in Figure 4.4 also lists these two names in the Sire and Dam fields of the "Almondene Beautys Lass" record. In fact the pedigree is constructed by looking at the names you have entered in the sire and dam fields and then checking if other records exists with matching names. Having found records for the parents, PedCloud then proceeds to lookup the names you entered for their sire and dam and repeats the process. This is shown in the figure below which contains stripped out sections from the database view for the entries we've just discussed.

Figure 4.1



Note that PedCloud is case sensitive, so if a sire is "fred" then it won't match a record with name "Fred".

5.4 Common Mistakes

Based on several years of supporting Breedmate products, a number of common mistakes have emerged that inexperienced users keep making. Here a list of do's and don'ts.

- Always **regularly backup your database** files to a flash drive or other storage medium other than your hard disk. If you keep just one backup you may corrupt it by backing up a faulty file. Making a backup is as simple

as using the Windows File Explorer to copy your .db file to a flash drive or to a cloud drive like Dropbox or Google Drive.

- You can use **FILE-Save Copy of Database As** to save copies. The copy is in a separate file and contains a copy of all the data in your current database. If you want to, at any stage you can use **FILE-Open Database** to then open one of the copies.

- If no forms are listed when you click the Pedigree drop down button, then that is because you do not have a form file open. To get forms back use **FILE-Open Form File**, go to the Public Documents\Breedmate\Forms folder and open the appropriate FOX file (either DogForms2.fox, UsDogForms2.fox, CatForms2.fox or UsCatForms2.fox .

- Show entries will not usually align with the preprinted form - the first time. This is because every printer has a different idea of how big the printable area of a page is. To make it align use Forms Edit mode to move the fields, if necessary change the printer orientation from landscape to portrait or vice versa.

- The "**default breed**" appears on many pedigrees. Normally all entries in a given file will belong to the same breed so rather than having to repeat this information for all entries, PedCloud provides a default breed. Normally you would set this once only. It can be set via the **TOOLS-Set Default Breed** in the database view.

- **Pictures are entered** by going to the database view, clicking in the photo field and selecting **EDIT-Insert Photo in Cell** or right click on the cell and select **Insert Photo**. Note this just puts the name of the file in the cell. PedCloud never stores the actual picture. Note that you should place all your photo files in a sub-folder called "Photos" located in the same folder that contains your database file, e.g. if your database file is "Poodles.db" and it is located in a folder "C:\TEMP" then your photos should go in "C:\TEMP\Photos". If you do not place photos in the designated sub folder then the full path name will appear in the cell, e.g. "C:\TEMP\MyPhotos\Spot.jpg" will appear, but if you placed in your Photos sub folder it would appear in the grid as "Spot.jpg". NOTE: if you are intending to publish your database on the web using a tool like PedigreePoint then you MUST place all photos in the Photos sub-folder. Doing so ensures that only the relative path to the file is stored rather than an absolute path.

- If a pedigree appears to be missing an ancestor even though the name of the ancestor appears in a sire or dam field, it is probably because the ancestor does not have a record of its own (i.e. the ancestor does not appear in the name field) or the name is misspelled, has extra spaces or is the wrong case, e.g. Fred will not match fred or FRED.

- If **asterisks (*) appear in a pedigree** form or other form it is because the Expressions for that form list fields which don't exist in the database table. Use EDIT- Expressions to fix this.

Also check the section titles FAQ for more hints.

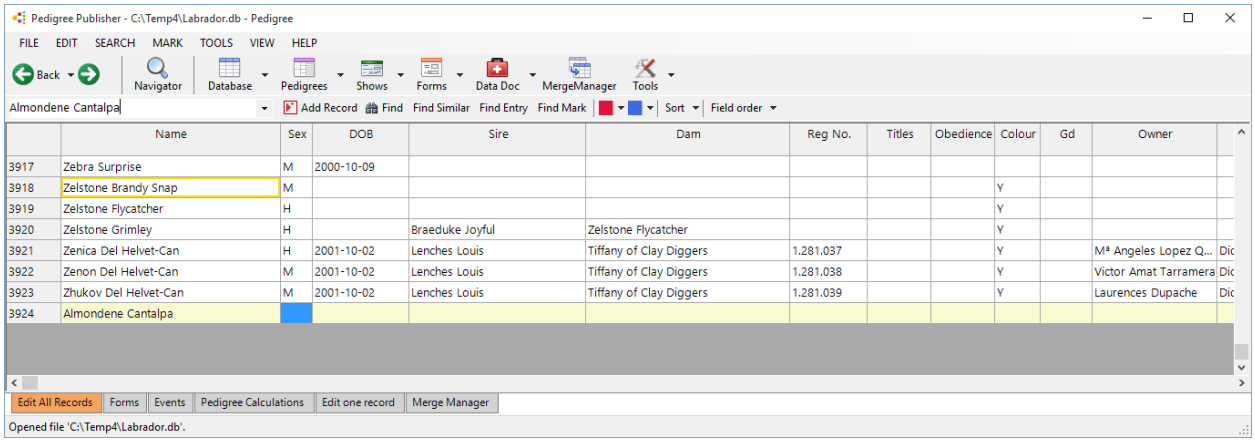
6 Entering Data

6.1 Adding a Record

Here are some of the ways you can add a record:

1. Type the name of the new entry in the edit box, e.g. as shown in Figure 5.1 - we typed “Almondene Cantalpa”. Then click on the **Add Record** button or hit the **F5** key. If the name already exists then it will add a blank record or if a blank record already exists it will just scroll to it. At this time you can then enter the name of the new record and hit Enter.

Figure 5.1



If the table has an integer autoincrement primary key then you can either enter a specific integer value which is not currently in that table OR leave the textbox blank and just click **Add Record**. This will cause a new blank record to be added.

6.2 Entering other fields

Now that you have added a record for your entry you can add the various fields by just typing them then hitting Enter after each field.

However, there are a number of methods which can speed things up.

1. If the data you want can be seen on the screen, click on the cell containing the data and holding the mouse button down drag the mouse up to the empty cell and release the mouse button. The data will be **dragged and dropped** in the cell. If you did not mean to drag the data and you have still not released the mouse button you can hit the ESC key to cancel the drag.

2. Use **copy and paste** to transfer data. Click on a cell with the data you want and hit Ctrl+C (that means hold the Control key down and type C), then go to the empty sire or dam cell and type Ctrl+V.

3. Use the combo box. If you click in a field like sire or dam then if you click the drop down button of the combo box on the toolbar, a list of names appear. Just double click on a list item or click once then hit Enter.

2. When entering a file path into a photo field, right click on the field. A File Open dialog appears. Select the file you want and click OK. The file path will be entered into the cell. Note the photo folder is always the Photos sub-folder in the folder where the database file exists.

Note: Any sire or dam name starting with # is considered a blank and will not be used in constructing pedigrees, e.g. when calculating COI. For example use #Unknown or #Unregistered.

6.3 Notes on Field Data

6.3.1 Entry names

All entry names must be unique but in the case of some older entries the names are usually very simple, e.g. Spot. To make the names unique we recommend the following:

- Prefix the name with the name of the owner, e.g. if the owner was Jack Thompson then the name Spot becomes “Thompson’s Spot”.
- Suffix the name with the year of birth or any registration number such as VSWDA numbers, e.g. if two entries were called Spot and they were born in separate years 1902 and 1912 then they would be called “Spot [1902]” and “Spot [1912]”.
- Suffix the name with the registering body or country, e.g. Snag [Italy] or Snag [AKC].
- Suffix the name with the [sire of well known name], e.g. Brutus [sire of Piraeus All Over Town].

6.3.2 Unknown names

Any name starting with #, e.g. “#Unknown” is treated specially. It is considered to be the same as blank so it won’t be counted as a common ancestor and hence affect COI calculations. You could also put in other helpful information like “#check sire with AG8765” – as long as it starts with a hash #.

6.3.3 Sex

The value you enter into the Sex field should be one of the following.

- Female : use any of: F, Female, B, bitch, mare, dam, spayed, sp
- Male: use any of: M, Male, gelding, stallion, s, sire, dog, neuter, nt

The gender test is not case sensitive. If it is not any of the above, then the gender is unknown and may be interpreted either way.

6.3.4 Date of Birth

All date fields are set to “auto” format in which case it will use the date format set on your PC.

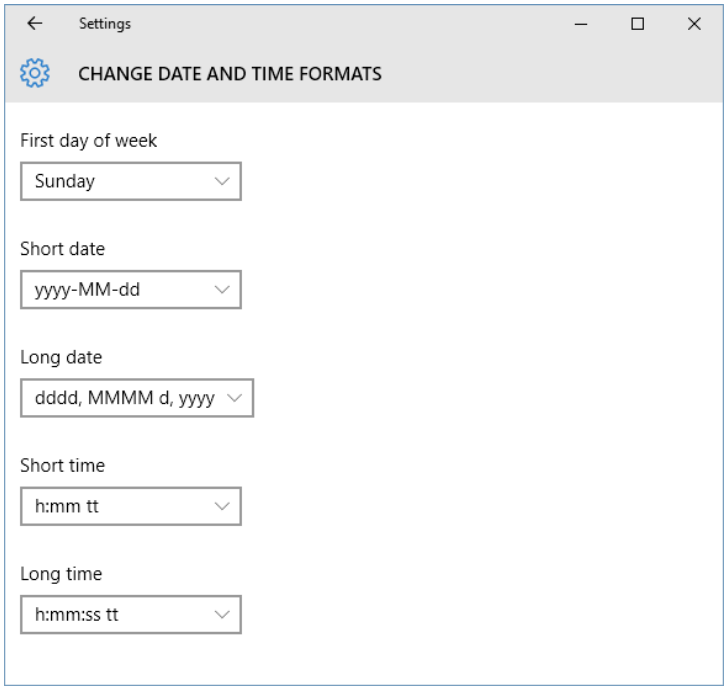
For the US the date format is mm/dd/yyyy for most other countries it is dd/mm/yyyy.

To change the date format you can either leave the format to “auto” in which case you will have to change the date format on your PC **or** force the date format. These two methods are described below.

6.3.4.1 Method 1

To set the date format on your Win 10 PC, click in the “Search the web and windows” box at the bottom left of your screen and type date format. A dialog appears, click on the “Change date and time formats”

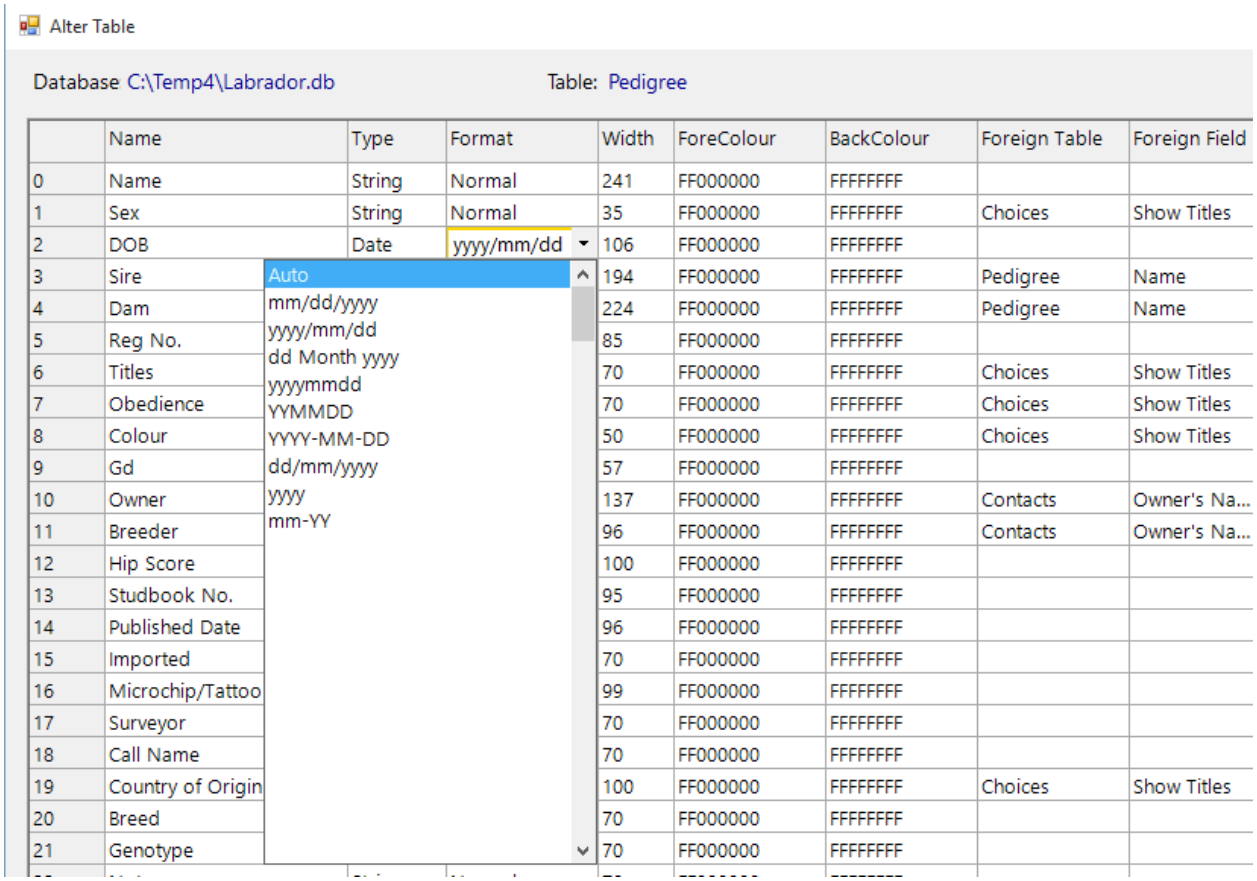
This brings up the dialog below:



Next change the “Short date”.

6.3.4.2 Method 2

If you don’t want to change the date format your PC uses then you will need to follow the second option of setting a specific date format within PedCloud. First change to the Grid view and click on **TOOLS-Alter Table** A portion of the screen is shown below:



	Name	Type	Format	Width	ForeColour	BackColour	Foreign Table	Foreign Field
0	Name	String	Normal	241	FF000000	FFFFFFFF		
1	Sex	String	Normal	35	FF000000	FFFFFFFF	Choices	Show Titles
2	DOB	Date	yyyy/mm/dd	106	FF000000	FFFFFFFF		
3	Sire			194	FF000000	FFFFFFFF	Pedigree	Name
4	Dam			224	FF000000	FFFFFFFF	Pedigree	Name
5	Reg No.			85	FF000000	FFFFFFFF		
6	Titles			70	FF000000	FFFFFFFF	Choices	Show Titles
7	Obedience			70	FF000000	FFFFFFFF	Choices	Show Titles
8	Colour			50	FF000000	FFFFFFFF	Choices	Show Titles
9	Gd			57	FF000000	FFFFFFFF		
10	Owner			137	FF000000	FFFFFFFF	Contacts	Owner's Na...
11	Breeder			96	FF000000	FFFFFFFF	Contacts	Owner's Na...
12	Hip Score			100	FF000000	FFFFFFFF		
13	Studbook No.			95	FF000000	FFFFFFFF		
14	Published Date			96	FF000000	FFFFFFFF		
15	Imported			70	FF000000	FFFFFFFF		
16	Microchip/Tattoo			99	FF000000	FFFFFFFF		
17	Surveyor			70	FF000000	FFFFFFFF		
18	Call Name			70	FF000000	FFFFFFFF		
19	Country of Origin			100	FF000000	FFFFFFFF	Choices	Show Titles
20	Breed			70	FF000000	FFFFFFFF		
21	Genotype			70	FF000000	FFFFFFFF		

Click in the Format cell of the DOB then click on the drop down button and select the specific format you want to use.

Please note the disadvantage of this method is that you will need to find every Date type field and manually change its format, e.g. the Date field in the Reminders table. Finally make sure to click the “Alter Table” button.

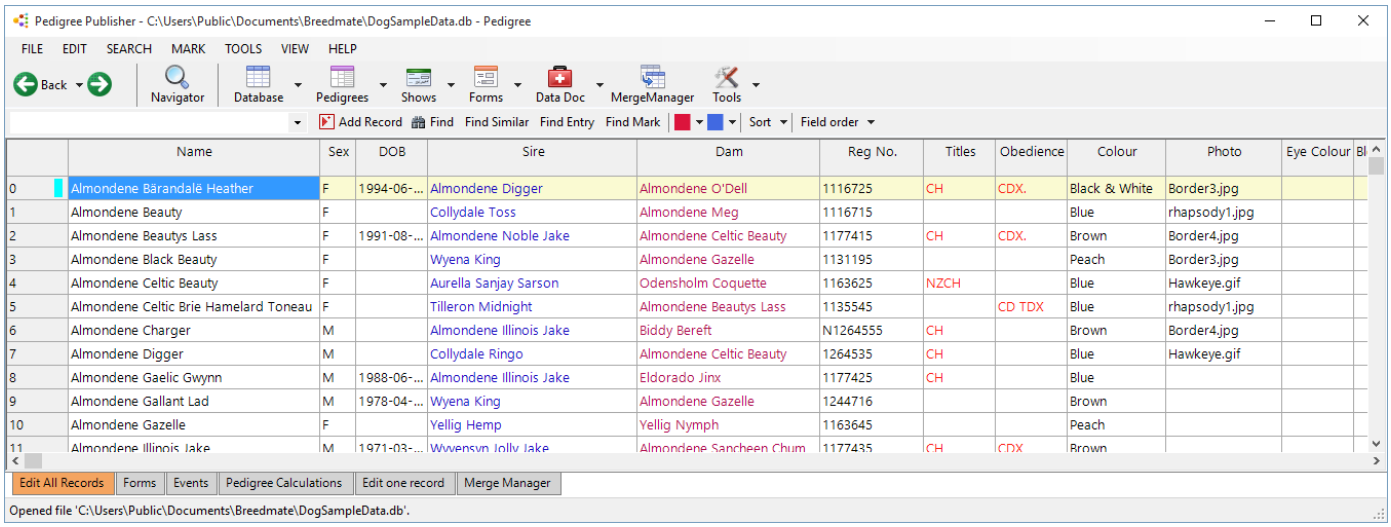
6.3.5 Breed

Generally speaking you don’t need to type anything in the Breed field as most databases are usually for one specific breed. To set the “default breed” use the **TOOLS-Set Default Breed** command.

The Breed field would only ever be used where there are mixed breeds in the one database as sometimes occurs in some cat breeds which are derived from other cat breeds. In this case anything typed into the Breed field overrides the “Default Breed”.

6.3.6 Photos

Most standard database files have at least one photo field in the Pedigree table – usually called Photo. Photo fields are used to store the file location on your hard drive of a photo. The photos are displayed in some pedigree forms (any form can be modified to show photos – this is covered elsewhere). A screen shot showing the dog sample database with some sample Photo field data is shown below:

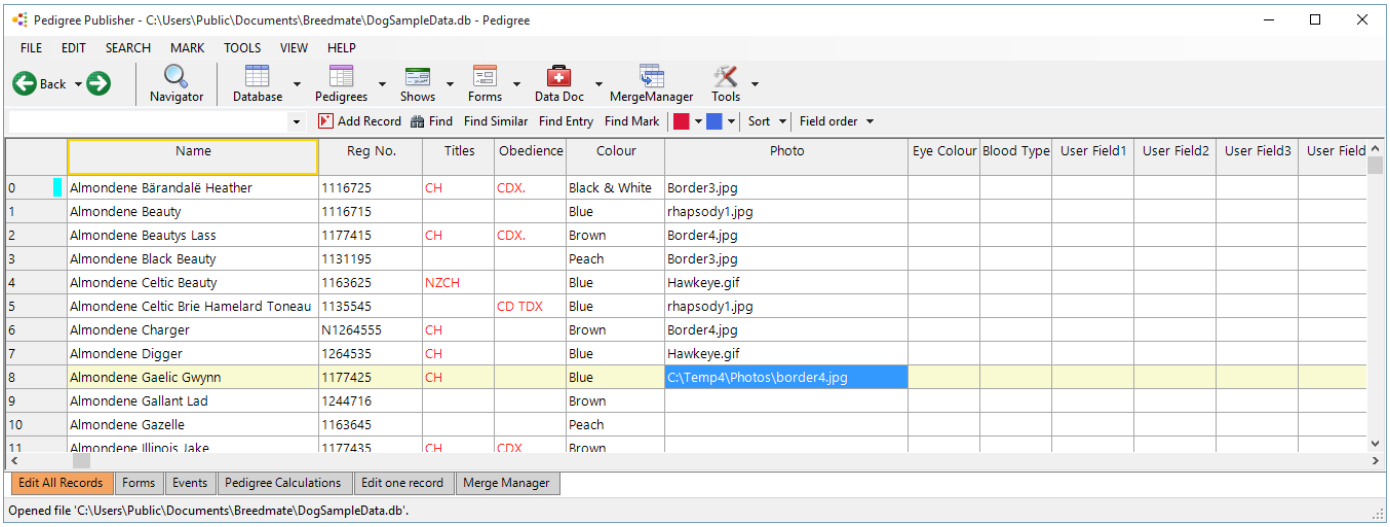


	Name	Sex	DOB	Sire	Dam	Reg No.	Titles	Obedience	Colour	Photo	Eye Colour
0	Almondene Bärandalë Heather	F	1994-06-...	Almondene Digger	Almondene O'Dell	1116725	CH	CDX.	Black & White	Border3.jpg	
1	Almondene Beauty	F		Collydale Toss	Almondene Meg	1116715			Blue	rhapsody1.jpg	
2	Almondene Beautys Lass	F	1991-08-...	Almondene Noble Jake	Almondene Celtic Beauty	1177415	CH	CDX.	Brown	Border4.jpg	
3	Almondene Black Beauty	F		Wyena King	Almondene Gazelle	1131195			Peach	Border3.jpg	
4	Almondene Celtic Beauty	F		Aurella Sanjay Sarson	Odensholm Coquette	1163625	NZCH		Blue	Hawkeye.gif	
5	Almondene Celtic Brie Hamelard Toneau	F		Tilleron Midnight	Almondene Beautys Lass	1135545		CD TDX	Blue	rhapsody1.jpg	
6	Almondene Charger	M		Almondene Illinois Jake	Biddy Bereft	N1264555	CH		Brown	Border4.jpg	
7	Almondene Digger	M		Collydale Ringo	Almondene Celtic Beauty	1264535	CH		Blue	Hawkeye.gif	
8	Almondene Gaelic Gwynn	M	1988-06-...	Almondene Illinois Jake	Eldorado Jinx	1177425	CH		Blue		
9	Almondene Gallant Lad	M	1978-04-...	Wyena King	Almondene Gazelle	1244716			Brown		
10	Almondene Gazelle	F		Yellig Hemp	Yellig Nymph	1163645			Peach		
11	Almondene Illinois Jake	M	1971-03-...	Wyvensyn Jolly Jake	Almondene Sancheen Chum	1177435	CH	CDX	Brown		

Note that the data in the Photo field contains just the name of the file not the full path. This is called relative addressing because the name is relative to the Photos sub-folder which is a sub-folder in the folder that contains your database file.

Normally you would store your database in “Public Documents\Breedmate” but you can store it anywere. Let’s say for example that your database is called Poodles.db and its stored in “C:\Fred”, then you should put all your pedigree related photos in “C:\Fred\Photos”.

If you do not use relative addressing then when you enter a photo file it will appear as the full path as seen in the screen shot below where the first entry is “C:\Temp4\GermanShepherd2_small.png”.

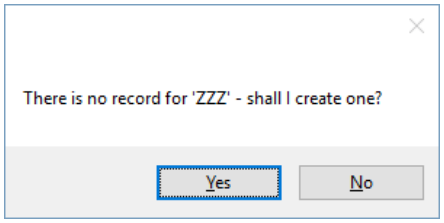


To enter data in a Photo field right click on the cell and select “Insert Photo”. A file open dialog will then appear.

If you wish to create additional photo fields then while in Grid view, click on the **TOOLS-Alter Table**. Any existing field can be renamed or use an unused field (they appear with a blank name). Set the Type to String and the Format to Photo.

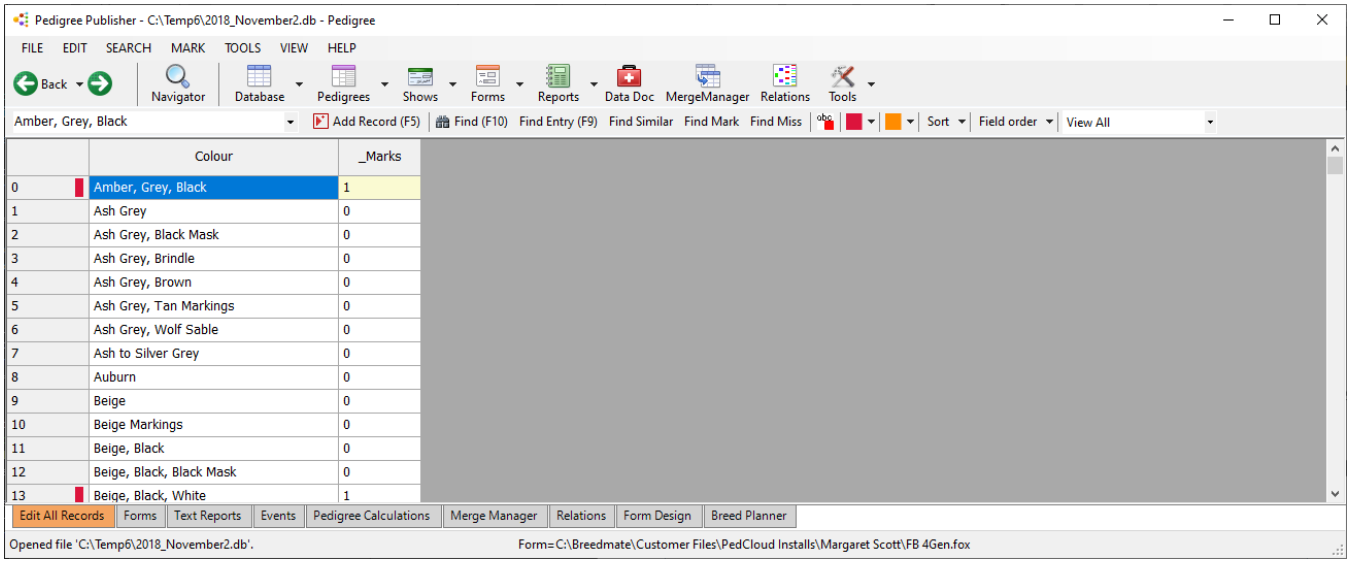
6.3.7 Titles, Obedience, Color

When you create a new database it will come with a brief list of titles etc. which will appear whenever you type into the Titles field. If you enter a title which isn’t in the list it will prompt with the following dialog:



If you select “yes” then it will add the new title to the list.

The list of Titles, Colors etc. can be edited manually by right clicking on any title or Color cell and selecting “View Lookups” or click the big Database button drop down and select the table.

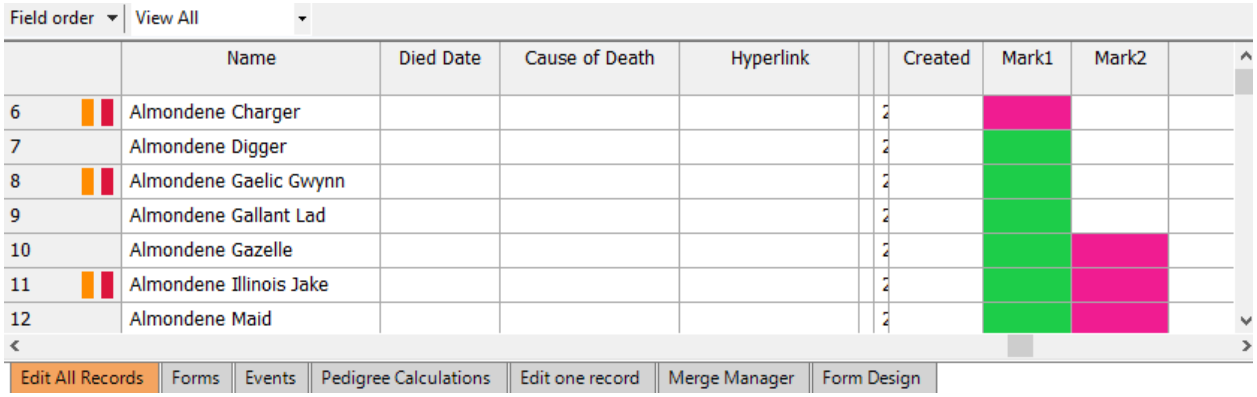


Please note some older databases stored the Color, Titles etc in the Choices table. The new database schema stores these lookups in their own individual tables.

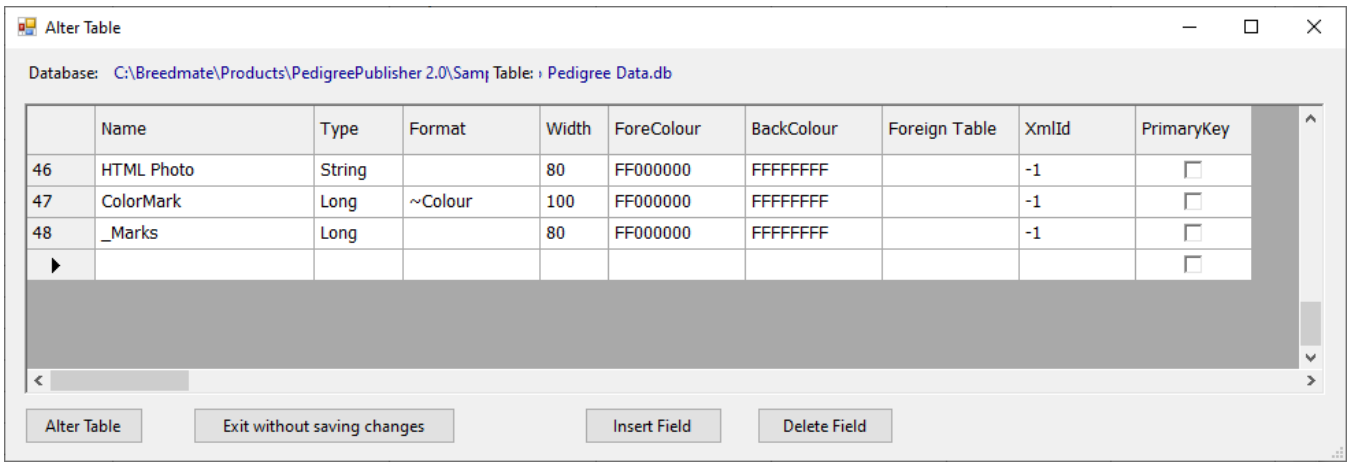
6.3.8 Color Fields

Color fields allow you to display a solid block of any color in a field. A sample screen shot below shows two fields, called Mark1 and Mark2 which have been set to that type of field.

To set the color displayed in that field, just right click on the cell and select “Set Color”.



To create a Color field, select **TOOLS-Alter Table,** click on the field where you want your new field to be inserted, then click the “Insert Field” button, type the field name in the Name column and set the Type to Integer or Long and the Format to ~Color as shown in the screen shot below.



6.3.9 Color Tables

Some users want a solid block of color to appear in the grid and on forms depending on the value of another field. Here is an example below where PSSMSuspect is a Color field that has color that depends on the value of the PSSM1 field. This obviously involves a lot of manual keeping the two fields in sync.

With the “Color Table” feature you don’t need the Color field. What you would do is a create a lookup table that has a name field and a Color field. The fastest way to do this is select a cell in the column you want to create the table for and use **TOOLS-Add lookup table to this field-With Color**. If we did this or the PSSM field we would get a table called _pssm1 with two fields: Name, Color.

	n/P1	
	n/P1	
n/n	n/n	
Sus...	Susp...	
Sus...	Susp...	
n/n	n/n	
n/P1	n/P1	
n/n	n/n	
S	S	

The lookup table would look like this:

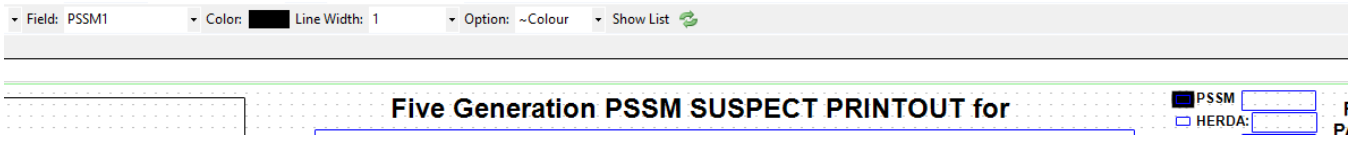
	Name	Colour
	*P1	
	n/n	
	n/P1	
	P1/P1	
	Suspect	

This provides a list of choices when entering data into that field and it automatically colorizes the field so that it now look slike this:

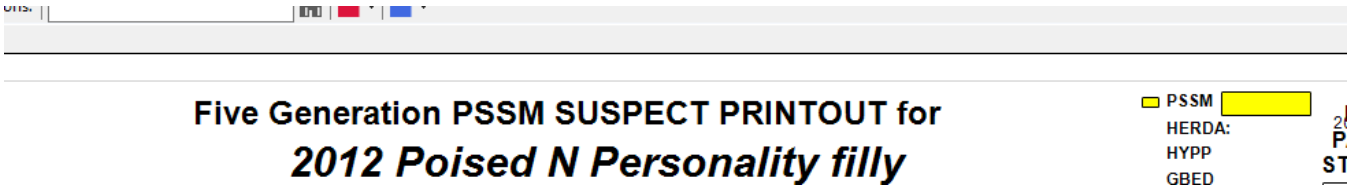
PSSM 1	PSSMACTUAL	PSSMSuspect	IMMH1
	n/P1		
	n/P1		
n/n	n/n		
Sus...	Susp...		
Sus...	Susp...	00FFFF	
n/n	n/n		
n/P1	n/P1		
n/n	n/n		
S	S		
n/P1	n/P1		

So far we have managed to get rid of a field and avoid a lot of manual work keeping to fields synchronized, i.e. keeping the color in one field matching the text I another field. The problem is how do we show the solid block

of color on a form. This is where we use the new Option parameter. If we display a field on a form and set the Option to ~Colour then instead of the text in the field being displayed, the color from its lookup table will be displayed. Here is what the field looks like in the form design view:



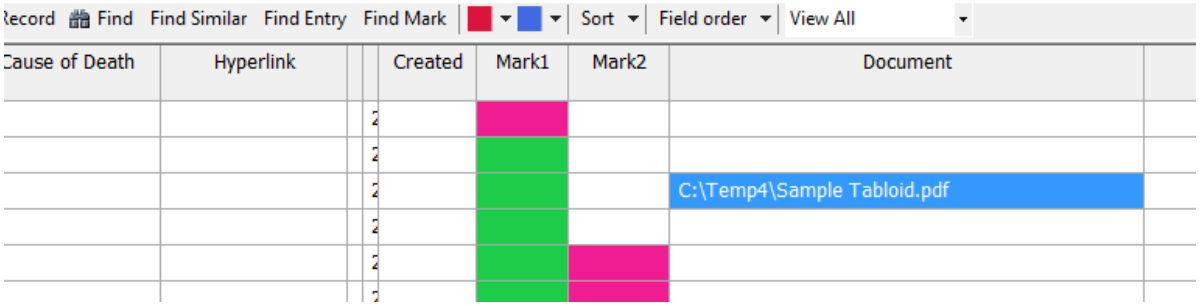
Notice on the toolbar the Field is PSSM1 and Option is ~Colour. In normal form mode this will look like this:



6.3.10 Link Fields

Link fields allow you to store the file path for any file or a link to any website, then when you double click on that cell or right click and select **Open Link**, PedCloud will launch the relevant application to open that file. In the screen shot below, we created a field called Document of type Link. For the record “Almondene Beautys Lass” we set the Document to be a PDF file.

If we double clicked on that cell the PDF reader would be launched and would display that file.



To enter a file path into a cell, right click and select “Insert Link” – this starts a file open dialog – choose a file and its full path will be inserted in the cell.

To create a Link field, go into design mode then select any available field, i.e. one that has no name (or just reuse an existing field by renaming it) and set the Type to String and the Format to Link.

6.3.11 Note fields

If you are using MySQL and you have a field that contains a large amount of text, you should probably set it up as a note field. The reason is that the MySQL INNODB engine has a maximum row size.

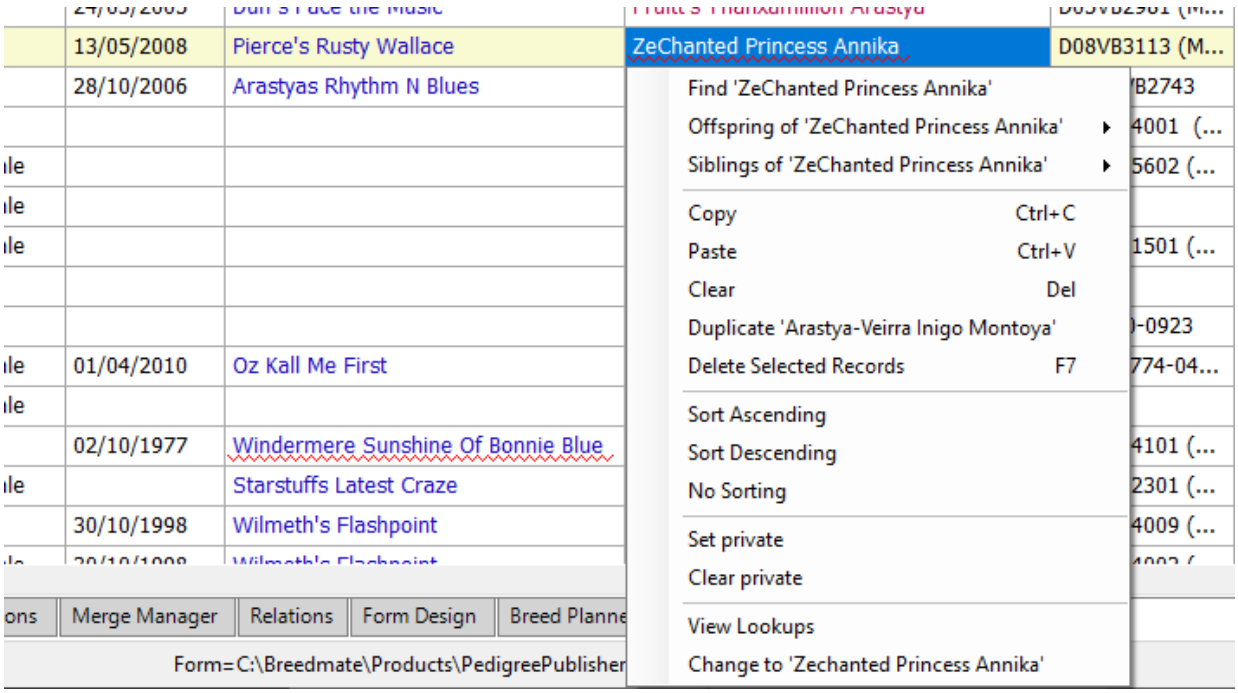
To handle large text a field type has to be changed from “varchar” to “text”. This is done using the **TOOLS-Add feature-Convert this field to handle large text** command.

6.4 Fixing Red Wavy Lines in Sire or Dam

A red wavy line in any field indicates that the name does not match the name of a record in the table it links to. For example if there is a red wavy line under Owner or Breeder then that name does not match a record in the Contacts table.

In the case of a sire or dam it indicates that the name does not match the name of a record in the pedigree table. The best way to fix this is to right click on the cell and look for last menu item which suggest the nearest actual name to change it to.

In the screen shot below “ZeChanted Princess Annika” does not match the correct spelling “Zechanted Princess Annika” (lowercase C). The menu item suggests “Change to “Zechanted Princess Annika”. If you select the menu item it will change all occurrences of the current spelling to the suggested spelling.



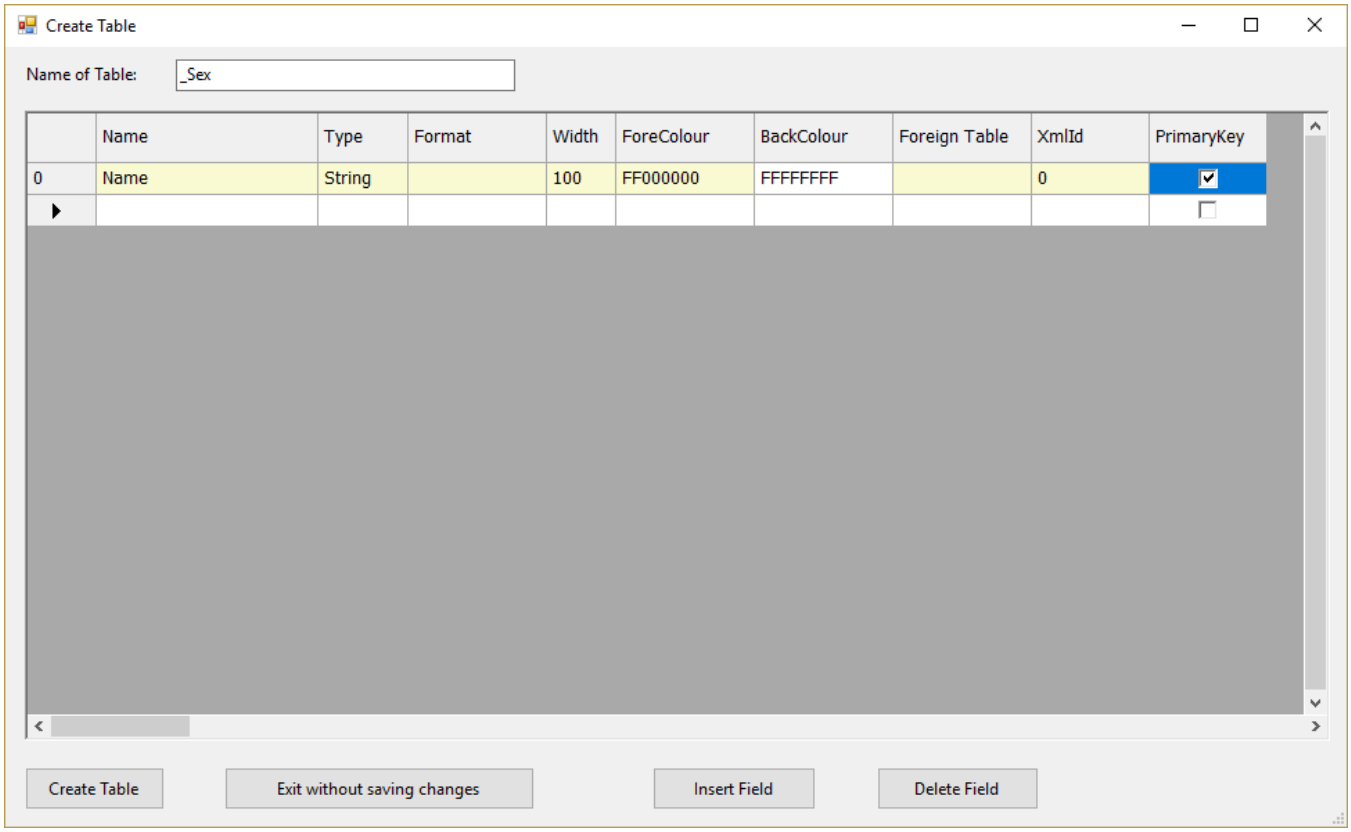
6.5 Configuring Red Wavy Lines

Some older databases which were converted from older versions of Pedigree Explorer won’t have the right lookup tables for some fields. If a field doesn’t have an associated lookup table it won’t display any red wavy lines but the down side is when entering into this column it won’t offer any choices from the lookups. For older databases, typically there won’t be lookup tables for the following fields: Sex, PreTitle, PostTitle, Color, Country.

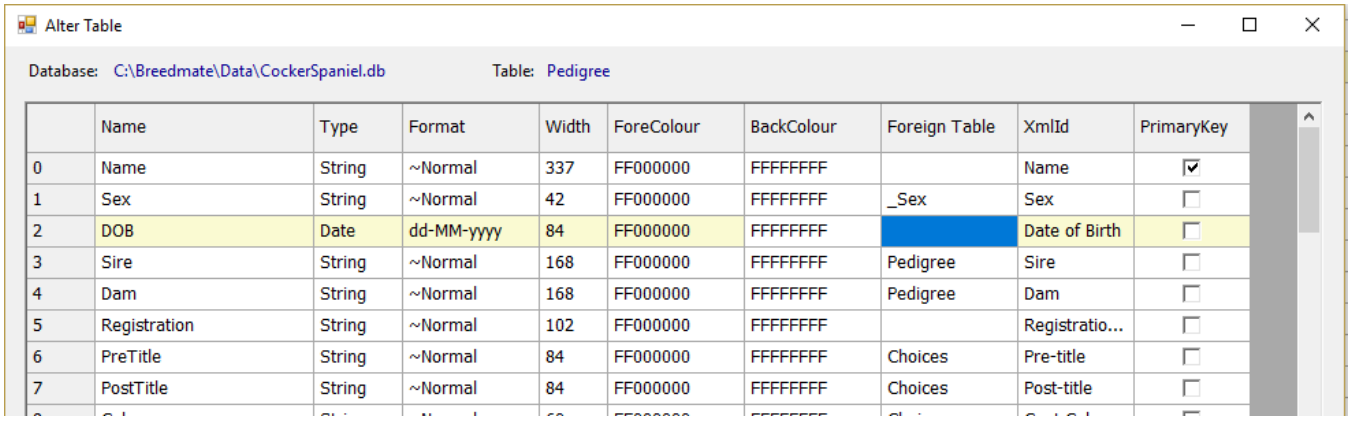
The fastest and easiest way to add a lookup table for a field is to click on the field, then use the **TOOLS-Add lookup table to this field** command. For field called Sex it will create a table called _Sex with one field called Name and which is the primary key for that table. It will then modify the pedigree Sex field to make _Sex the lookup table.

As an alternative, if you wanted to manually add a lookup table, we will show how to add one for the Sex field. Standard practice is to name such a lookup table starting with an underscore and then then name of the field it supplies the dropdown list to. In the case of the Sex field in the pedigree table, first check if the _Sex table exists. If not, create it using the **TOOLS-Create Table command**. It will display a dialog as shown below. For lookup tables it is only necessary to add one field. The name of the field can be anything, but standard practice is to just call it Name. You should also make sure that its Type is string and that the PrimaryKey is ticked, then click the “Create Table” button.

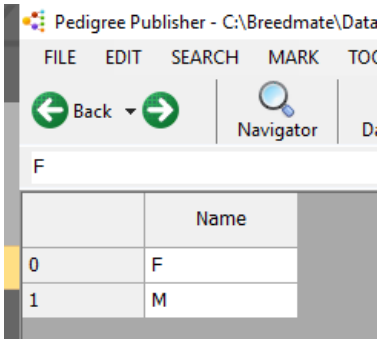
After exiting the dialog, you will be in the newly created _Sex table.



Now that the lookup table is created you need to tell PedCloud to use it for the Sex field so go back to the Pedigree table and use the TOOLS-Alter Table command. As shown below, set the Foreign Table for the Sex field to be _Sex.



Click “Alter Table” button. Now the final step is to add lookups to the table. For the Sex field click on any M, hit Enter, PedCloud will offer to add a matching record, click yes. Do this for F. Now all the red wavy lines for all M and F Sex fields will dissappear. If you car to go to the _Sex table you will as shown below.



6.6 Bulk Fixing Red Wavy Lines

If for example you have just imported some pedigree table and it includes a lot of owners and breeders these will probably get red wavy lines because their names are not in the Contacts table. Regardless of what field it is

you can automatically fix all red wavy lines using the "EDIT-Fix Lookups" command. This will fix all the red wavy lines in the currently selected column. Note the red wavy line indicates that an entry in that the text in the column does not exist in its lookup table, e.g. if the PreTitle column has a red wavy line under "Can CH" then that means there is no entry "Can CH" in its lookup table which is the _PreTitle table.

The process fixes the lookups by getting a distinct, i.e. no repeats, list of all the entries in that column that have a red wavy line and adds those to the lookup table for that column.

Note this command assumes you have followed the steps in the previous sections first. More specifically you should manually investigate the red wavy lines first to see if it is just mis-spelled or mis-cased otherwise you will be adding a lot of entries to your lookup table which are mis-spellings or mis-casings.

6.7 Entering Long Text

If you have a field that contains a large amount of text, we suggest that you right click on the cell and click “Edit large text”. This opens a dialog that allows editing that text but in a much larger textbox that also handles the **Enter** key.

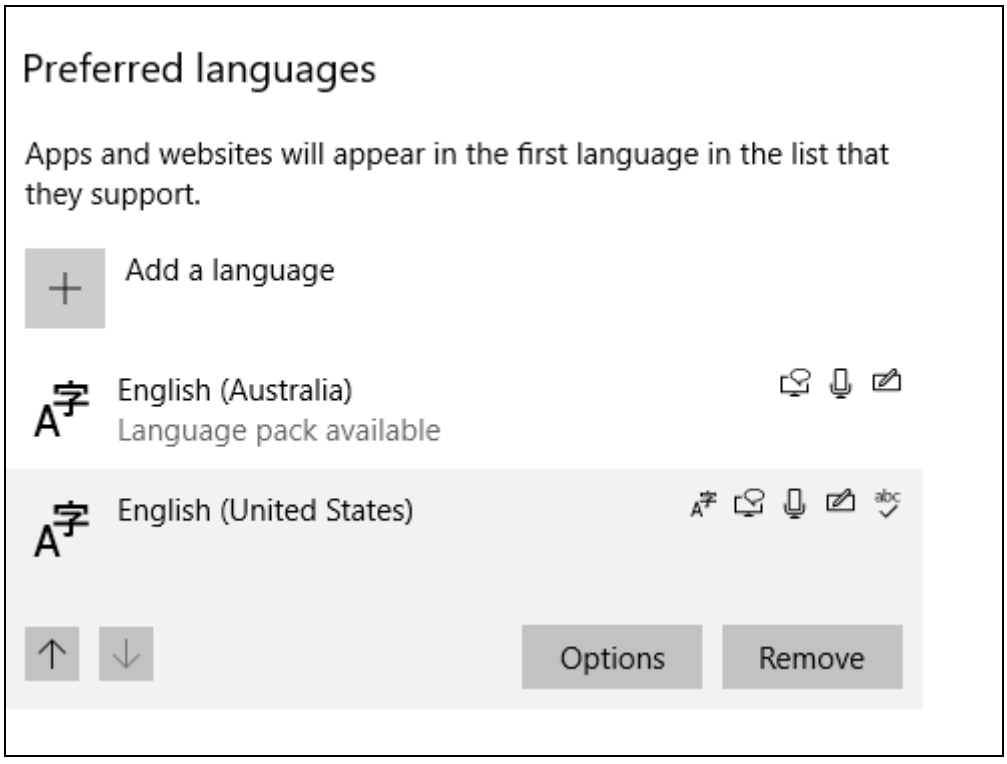
6.8 Entering Foreign Characters

These are also called “diacriticals” or accents. Follow the advice at this link.

https://community.windows.com/en-us/stories/keyboard-shortcuts-for-typing-accent-marks-over-letters-in-windows-10

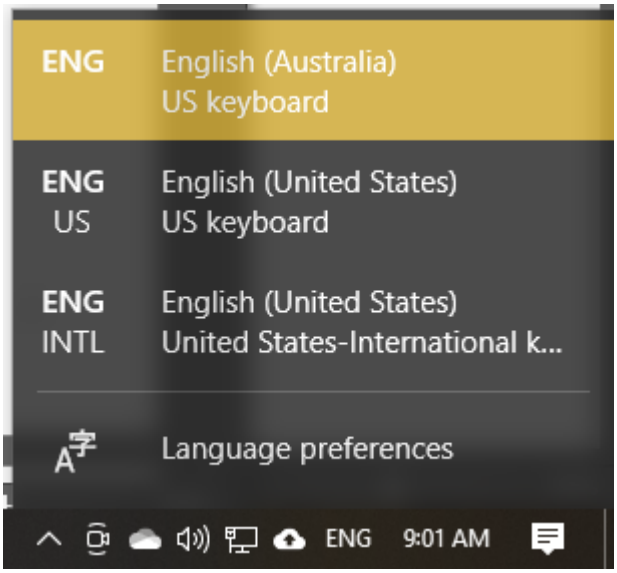
In basic terms, click the Windows icon at bottom left of screen, type Language, then click on Language Settings.

If you don’t have “English (United States)” installed, then install it.



Then click on it and select “Options”. Click “Add a keyboard” and select “United States-International”.

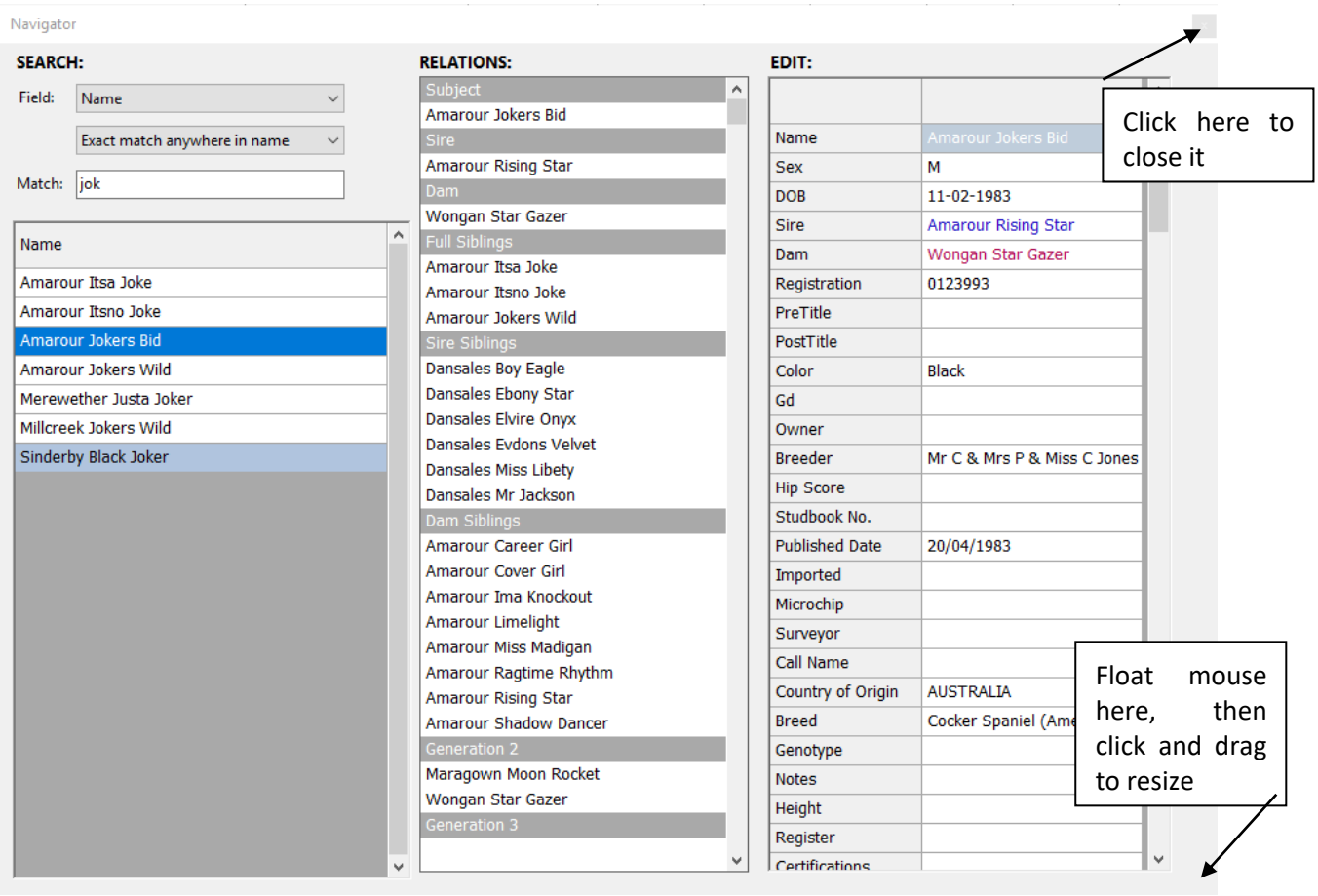
It will now be available at the bottom right of your Taskbar as shwon in the screenshot below. Click on the “ENG” and the menu pops up for selection of a keyboard.

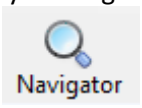

ENG
English (Australia)
US keyboard
ENG
US
English (United States)
US keyboard
ENG
INTL
English (United States)
United States-International k...
Language preferences
ENG
9:01 AM

7 Navigator

The Navigator is useful if you have two screens. It runs in a popup dialog which you can then position on your secondary screen.

After you've played with PedCloud for a while you will decide either you want to have Navigator there **all the time** or **only have it popup as needed**. Below is a close up of Navigator:



It can be moved around by clicking on the title bar and dragging. It can be closed by clicking on the red cross top right. To reopen click the 

button or hit the F2 key.

The advantage of "hiding" it is that you get more screen space.

The Navigator has three parts which are organized in columns and are from left to right:

- SEARCH
- RELATIONS
- EDIT

These are described in the following sections.

7.1 Search

The Navigator SEARCH function will search whatever table you activated it on so if you were in the Pedigree table it will search the Pedigree table. Similarly, if you activated it, the Contacts tables would list names from the Contacts table. The field it searches is selected from the combobox at the top of that section. Normally you would only search the Name field but it can be useful to search other fields like registration number, to see what has been entered so far.

If you are searching the Name field and you are in the Pedigree table then the search results will be pedigree names and if you click on one from the SEARCH list results, then it will be available for editing in the EDIT section and its relatives will be listed in the RELATIONS section.

The combobox below Search allows you to select how the name is matched, either match from the beginning , match anywhere in the name or match similar names.

7.2 Relations

When you first open the Navigator the RELATIONS section will list relatives of the currently selected entry in the Grid view. Also if you click one of the SEARCH results then the selected name will have its relations listed.

The relations listed are:

- Sire, dam
- Sire siblings, dam siblings, full siblings
- Litters grouped by mate

If you click on any relative in the RELATIONS list then it will be selected as the subject in the EDIT section.

7.3 Edit

The EDIT section provides access to all the fields in a given record listed in a column down the page. The subject of the EDIT section can be selected by clicking on a SEARCH result or a RELATIONS relative.

All the usual edit functions are available so if you change the name of a record it will ask if you want to change linked records, in other words if that name appeared in the sire field of another record then that sire would also be changed so as to preserve the connection.

8 Commands

8.1 Main Menu Commands

Some useful main commands while in the Grid view (Edit All records):

EDIT menu

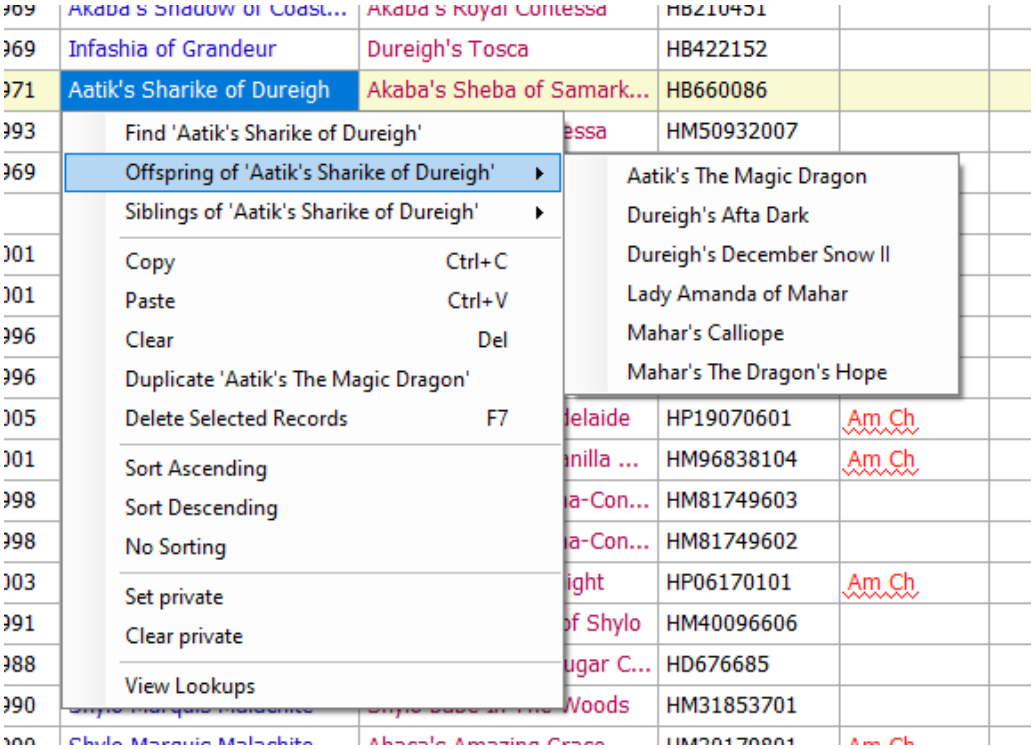
"Copy"	(Ctrl+C) – copy the currently selected grid area to the clipboard.
"Paste"	(Ctrl+V) – copy the currently selected grid area to the clipboard.
"Clear"	(Delete) – copy the currently selected grid area to the clipboard.
"Multi-Paste"	(Ctrl+Shift+V) – copy the currently selected grid area to the clipboard.
"Insert Records"	(Ctrl+R) – paste the contents of the clipboard as new records. This is particularly useful when copying data from Excel where you would first set the columns in Excel to be in the same order as you see them in the Grid view, select them then use this command.
"Insert Photo in Cell"	If the cell has been configured as containing a photo (in TOOLS-Alter Table the Format will be ~Photo) then an Open File dialog will appear. Select a file and the file path will be inserted in the cell. Note that ALL photos should be placed in a folder in which is in the same folder as your .DB database file. If it is in a sub-folder the path that appears in the cell will be a relative path, e.g. "/Photos/Fred.jpg". If the phot you have inserted is NOT in a sub-folder then the path will be absolute, e.g. "C:\Photos\Fred.jpg" – which is not what you want. The reason for keeping it relative is so it can export to PedPoint, also it allows you to share with others who may not have the exact same folder structure as you.
"Add Record"	The name in the toolbar textbox will be used to create a new record with that name.
"Duplicate Record"	(F6) Duplicates the currently selected record but changes the name by adding a version number at the end. Useful for entering litters.
"Delete selected records"	The selected records will be deleted. You will be prompted to check you really want to delete those records.
"Remove Leading and Trailing Spaces"	Does as the name suggests. Useful because some names **may appear the same** but not be the same because of spaces at the front or end. This can happen most often with imported data.
"Change Case"	Title, Upper, Lower. Depending on your preference this will change the selected cells to use that casing. So "fred" when changed to title case would become "Fred" or to upper case would become "FRED". This command is useful if you have imported data from another database that uses different casing.
"Create Gender"	If the Sex field is empty and the record's Name appears only in Sire fields or only in Dam fields then the Sex field is filled in with either M or F.

8.2 Right Click Menu Commands

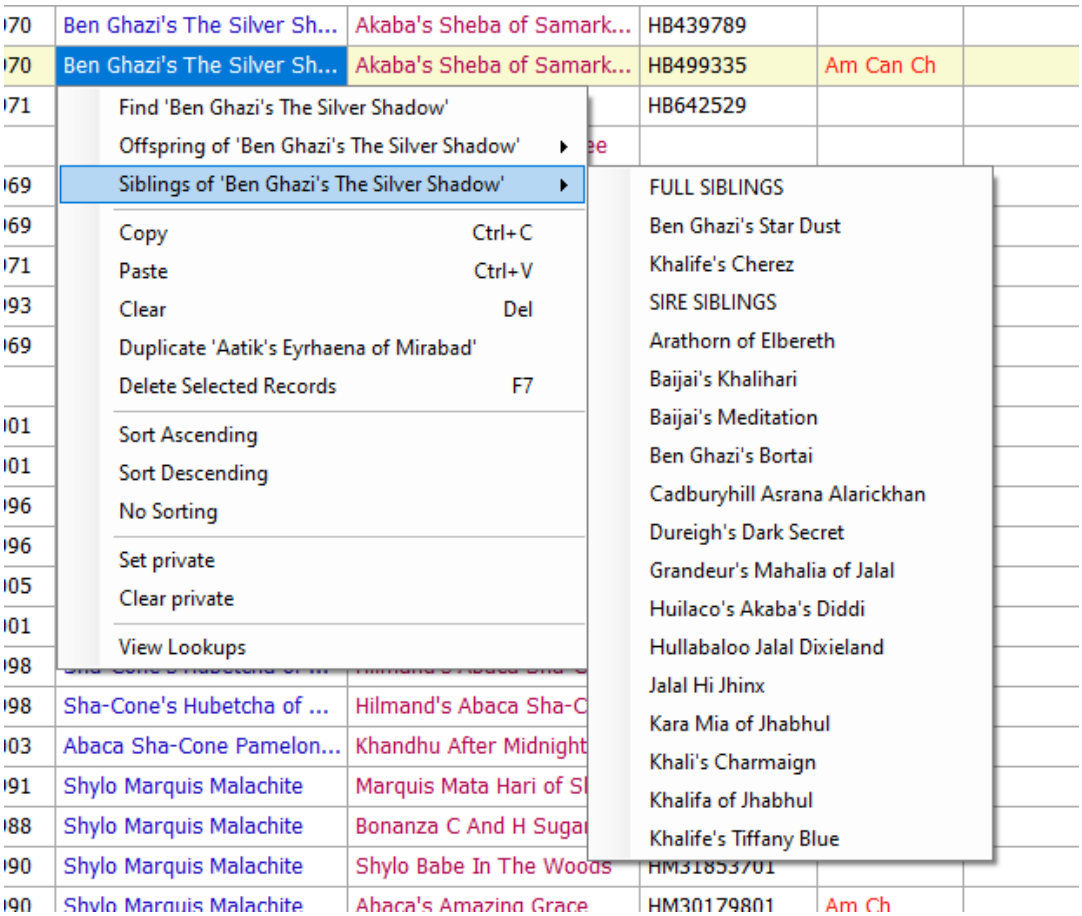
Right clicking on a cell in Grid view brings up extra commands. The commands will vary depending on what cell you click on.

"Find 'XXXX'" Where 'XXXX' is the content of the cell you have currently selected. Will jump to the record with that name in the Grid. Usually appear on the Sire and Dam fields.

"Offspring of 'XXXX'" Where 'XXXX' is the content of the cell you have currently selected. Lists all offspring of 'XXXX'. Example below:



"Siblings of 'XXXX'" Where 'XXXX' is the content of the cell you have currently selected. Lists all the siblings of 'XXXX' grouped by full, sire and dam.



"Sort Ascending" Will sort the grid in ascending order based on the values in the currently selected column.

"Sort Descending" Will sort the grid in descending order based on the values in the currently selected column.

"No Sorting" Returns the grid to unsorted which means it will be sorted on the primary key of the current table which is usually the Name.

"Set Private" Marks the current records as private. This is only useful with Pedigree Point where it will not show any private marked records in any search or report.

"Clear Private" Removes the private mark.

8.3 Keyboard Commands

A list of the available direct keyboard commands is shown below:

"Enter" the contents of the Edit Box replaces the currently selected cell – the next field is then selected.

"Delete" The **Delete** key in the database view will clear the currently selected cells. It has no effect in the Forms View.

"F2" Navigator.

"F5" **Add Record** command - will add an entry with the name in the edit box

"F6" **Copy Record** command - will add an entry with the name in the edit box and copy all of the other fields from the currently selected record.

"F7" **Delete Record** command.

"F8" **Mark** command.

"Shft+F8" **Clear Mark** command.

"F9" **Find Record** command.

"F10" **Find Next** command.

"F11" **Find Mark** command.

"F12" **Find Replace** command.

"Ctrl+C" In database view copies contents of selected database region to clipboard. In form designer view, copies selected objects to clipboard.

"Ctrl+V" In database view paste contents of clipboard to selected database region. In form designer view pastes selected objects from clipboard.

"Page Down" The database view will scroll down (i.e. towards the end of the file) by almost a full page length.

"Page Up" The database view will scroll up (i.e. towards the beginning of the file) by almost a full page length.

"Up Arrow" In database view it moves to previous record in database view. In forms edit view it will move selected items up one unit.

"Down Arrow" In database view it moves to next record in database view. In forms edit view it will move selected items down one unit.

"Ctrl+Left Arrow" In database view it moves to the first field in the current row.

"Ctrl +Right Arrow" In database view it moves to the last field in the current row.

The following keys work when the database view or the edit box (which is also in the database view) has the focus. The term focus means, which window is receiving keyboard input, and when the edit box has the focus then these keys have a different function from when the database view itself has the focus, e.g. the Home key sets the cursor to the beginning of the text in the edit box when it has the focus, but when the database view has the focus, it sets jumps to the first record of the current table.

"Home"	The database view will scroll to the beginning of the file.
"End"	The database view will scroll to the end of the file.
"Left Arrow"	In database view it moves to previous (left) field. In forms edit view it will move selected items left one unit (either 1mm or 0.1mm depending on whether Snap To Grid is selected).
"Right Arrow"	In database view it moves to next (right) field in database view. In forms edit view it will move selected items right one unit. In forms view it will select the next field and highlight it in yellow.

When the edit box has the focus, the function of the above keys change as follows:.

"Home"	Cursor moves before first character in edit box.
"End"	Cursor moves to after the last character in edit box.
"Left Arrow"	Moves cursor in edit box back one position.
"Right Arrow"	Moves cursor in edit box forward one position.

You can change the focus by clicking on either edit box or database view with your mouse. Also if you start typing then the focus always changes to the edit box. You can also change focus to the edit box by hitting the **Insert key**, and switch to the database view by hitting the **Escape key**.

8.4 Tool Bar Commands

The tool bar contains several buttons which are short cuts for some of the more commonly used menu commands. To use any of these, just click on the relevant button.

8.4.1 All Views

The following buttons are available in **all views**:

Backtrack button. It is identical to selecting **Backtrack** from the Search menu.

Foretrack button. Only works if you have already backtracked. It is basically the reverse of backtrack and will take you to the next selected entry.

8.4.2 Database View

The following buttons are exclusive to the **database views**:

This is the **Find Next** button. It is identical to hitting the F10 key or selecting **Find Next** from the Search menu. To find the previous occurrence of a string, hold down the shift key while selecting the **Find Next** command.

Marks all record where the currently selected column contains the substring in the toolbar editbox.

Primary Mark color. Click the main part of the button to mark the current record in this color. Select the drop button to bring up a menu to select the primary color.

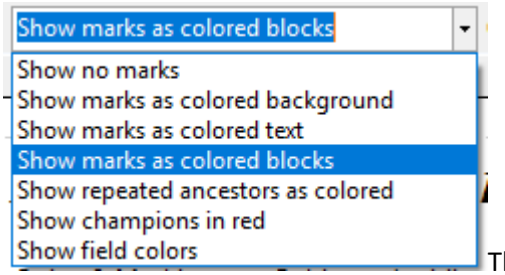
Secondary Mark color. Click the main part of the button to mark the current record in this color. Select the drop button to bring up a menu to select the secondary color.

8.4.3 Forms View

The following buttons are exclusive to the forms view and PedChart view:

Zoom In button. Used to increase magnification and make items on the form appear larger.

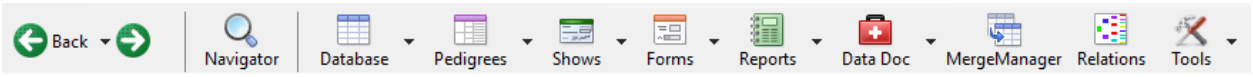
Zoom Out button.



This is a combobox that shows different options when displaying a form.

9 Browser Bar

This bar has the following buttons:



The buttons from left to right are:

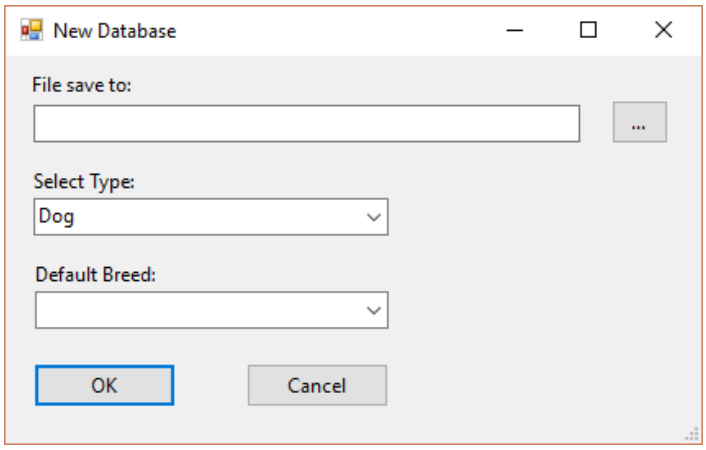
- Back button – click on it to go back to the previous record you had selected and the previous form you were viewing it in. If you float over this button a drop arrow appears on the right. Click this to see the list of records you have visited and select one to jump to it.
- Forward button (appears as a right arrow). If you have backtracked then this button will be enabled and you can move forward to retrace your backsteps. As soon as you select a record such as by double clicking in the Grid view this forward track list is cleared.
- Navigator – click to use the popup Navigator window. Its main features are SEARCH, RELATIONS, EDIT
- Database - click the drop down button to get a list off all the tables such as Pedigree, Contacts, Shows.
- Pedigree – click the drop down button to get a list of pedigree forms, e.g. “4G Pedigree”
- Shows – a list of Show related forms such as show entries.
- Forms – all other forms not in the two previous categories.
- Reports – these are text only reports
- Data Doc – the Data Doctor provides a range of optional reports that help fins problems with your data such as entries that were born before their parents or have incorrect gender.
- Merge Manager – interactive viewing and merging of another database with your current database.
- Relations – view the subject entry with its relations

10 Files

10.1 Create Database

So far we have just played around with the sample database that came with PedCloud. You will probably now want to create your own database to store information on your breed or breeds.

Every database file ends in ".DB" and normally you will create one file for each breed. So let's assume you have Golden Retrievers and that you want to call your database "GOLDEN.DB". The first step is to start PedCloud and then select **FILE-Create Database**. A dialog appears offering usually Dog, Cat and "Browse…" as shown below.



Select Dog or Cat is appropriate or whichever other template fits your needs.

Entries can now be entered as described in Section 5. Note that there is no Save command because all changes are written immediately to the database.

10.2 Backing Up Your Data to External Media

Because disaster can strike your computer at any time you should make regular backups (say daily or weekly depending on level of activity) and save them to external media such as an external hard drive or USB Flash drive.

To back up your database the simplest way is to use **FILE-Save Copy of Database** .

Alternatively you can manually copy the database file by using Windows File Explorer. One way to start it is **FILE-Open File Explorer**.

To copy the file in File Explorer, select the file you are saving, then right click on it and select Copy. Next select the folder in the external drive you want to back up to, then right click on it and select Paste.

Note: You should regularly make copies of your database files on to external media and store these media in a safe place. It is also wise to use more than one backup media as they can become corrupted or fail.

Note: You can also save files to a CD-ROM but you will need to use a specialist application such as Nero to do this. Also note that PedCloud will not open a file on a CD-ROM. It needs to be copied to your hard drive first and you may need to right click on it from Windows Cloud, select Properties and check that "Read-only" is NOT ticked.

10.3 Backup and Restore

A quick way to make backup copies of your database is to use **FILE-Save to Backup**. This will copy your current database to a sub-folder called "Backups" and will name it in numeric order and with a ".back" file extension. So let's say your database file is called "Fred.db". When backed up the first time, the file will be copied to the "Backups" folder and called "Fred (1).back". If you call **FILE-Save to Backup** again, another backup file will be created, this time called "Fred (2).back". The numbers will just keep going up every time. To avoid too many

backup files being created only the most recent 10 backup files are kept so it isn't necessarily a good idea to keep backing up unless you have made significant changes.

To restore from a backup, use the **FILE-Restore Backup**. This will list all the backup files of the same name as your current database, along with the date the backup file was created.

When a backup is restored, the restored file is always copied to the "C:\Users\Public\Documents\Breedmate" folder and will also be versioned so as not to overwrite any existing files. To be clear, all the backup files are left as is and the restored file is guaranteed not to overwrite your previously opened file. Hence if you accidentally restored a backup when you didn't mean to, you can always go back to it.

If you don't have any databases currently open, the **FILE-Restore Backup** will not list any matching backup files. Hence if you want to open any backup file use FILE-Open Backup File. This will show a file open dialog and will list all .back files. Just navigate to the backup folder you want then select the backup file you want to open. As for the backup restore, the backup file will be copied to the "C:\Users\Public\Documents\Breedmate" folder and renamed with a .db extension and with a unique versioned name so as to not overwrite existing files.

10.4 Opening Other Files

If you have several breed files you will sometimes want to operate on one or the other. Use the **FILE-Open Database** command to read in the required file. Note: you can only open one database file at a time.

When Pedigree Cloud is started again it will automatically open the last database file opened in the previous session. Note the bottom of the File menu lists the last 20 opened files.

10.5 Merging data

The **FILE-Merge Database** will merge a selected file into the current file. If an incoming record's name is not in the current database it is added. If that name already exists, then it is not added but if one of its fields has data and the current record of that name has the same field empty then that field is copied across. For example if you were merging a database that had a record "Fred" but you already had a "Fred" in your current database and lets say the current Fred has an empty PreTitle field but the incoming Fred has something in its PreTitle field then that PreTitle information would be copied across.

10.6 Recovering Data from a Damaged PedEx Database

If PedCloud can't read a BMX database file, it may be possible to recover the data from it using the **TOOLS-Open Damaged BMX file**.

10.7 Finding Lost Files

Normally PedCloud will automatically open the last file you were working on. But if you had moved or renamed it, it won't be able to open it. In this case you will need to use **FILE-Open Database** and use the dialog to select the file in its new location or with its new name.

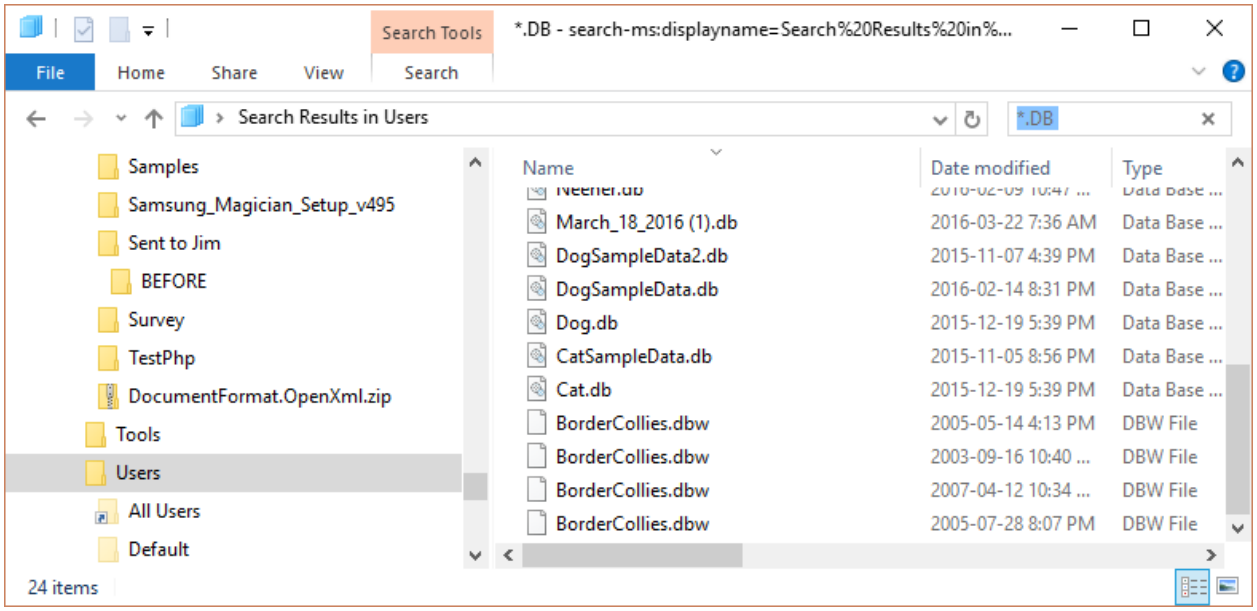
Sometimes a user will forget where they have saved a database or even what name they used. This can also be a problem when upgrading from an older version of PedCloud.

To find a "lost" database use the **File Explorer (Hold down Windows key and tap E)**. This can also be started from the Task Bar by clicking on the Cloud icon – it's the one the start button then pick File Explorer. It can also be started from within PedCloud using FILE-Open File Explorer.

When File Explorer starts, right click on the C: Drive icon and select Search from the context menu as shown below. Generally DB files can be stored anywhere but if you are an inexperienced Windows user then we suggest keeping them in your "Public Documents\Breedmate" directory. If you find your lost files you should move them to this location.

The Cloud search dialog will appear. Enter *.DB and click on the "Search Now" button as shown below.

A list of paths for all DB files stored on your C: drive will be shown on the right hand side of the window. You may need to repeat the search for each of your other hard drives if you have any, e.g. D: drive.



10.8 Emailing large databases

If you are emailing large databases its best to keep the overall size to less than 10MB. The easiest way to do this is to zip the file. This can be done in File Explorer (which you can launch by holding down the Windows/Start key then tapping E) by going to the folder containing the database, right click on the file and select “Send To” then “Compressed (zipped) Folder”.

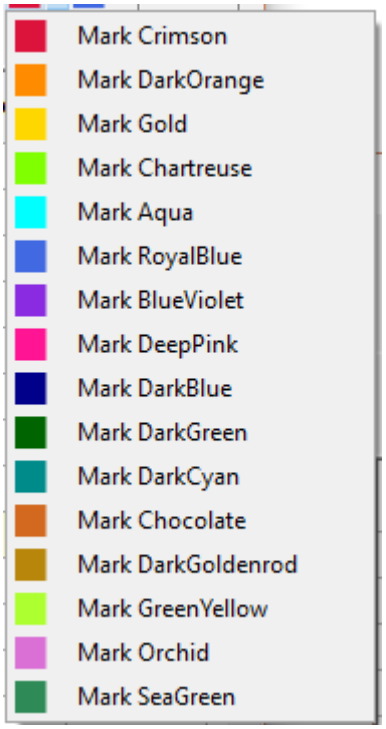
After zipping the file a compressed copy of the file is made with the same name but with a .ZIP extension, so if your database was called MyDogs.db then the zip file would be called MyDogs.zip. Check the file size in File Explorer before emailing it. Sometimes the file size isn’t shown but you can get it by right clicking on the file and selecting properties.

If the file is still too large then another alternative is to one of a number of web sites that transfer large files. One that we use is www.wetransfer.com.

11 Marks

Any record can have up to eight differently colored bookmarks – or as we refer to them “marks”. The mark colors are shown below.

A record can have any combination of marks at any time and the marks are saved with the data so they persist from one session to the next. There are many commands available for marking as detailed in the following sections but the simplest way to mark a record is to select one or more of them and hit the F8 key. This will mark those records using the current “primary” color. This color can be changed by clicking on the mark button’s drop button and selecting from its menu of colors as shown below:



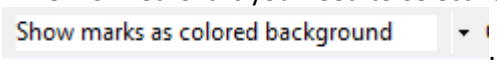
Some other keyboard commands are as follows:

- Ctrl+F8 – will mark in the secondary color.
- Shift+F8 – will clear the primary mark

11.1 Displaying Marks

Marks are displayed in the Grid View in the first column and also in the Form View and Ped.Chart. The marks are shown in the background as vertical colored bars. The available area is divided into as many bars as there are marks so if a record has one mark then the background will be one solid color, but if it has say four marks then there will be four equal size bars in the colors of the marks. The example below shows records with both red and blue marks.

14	ALDACHELL SECRET LOVE OF DEERIEM	H		CRAIGOWL BLINDFO...	ALDACHELL A
15	ALICE	H			
16	ALICIA DES MARLIVIERS	H		THE SHANDY DOG	USTELLE DE I
17	ALLISON DE NORLYS	M		DONAVAN VAN HET ...	KARINA VAN
18	AMANTRA BOOGIE WONDERLAND OF TELVA...	H			
19	AMANTRA GIPSY GIRL	H			
20	AMANTRA GOES TO HOLLYWOOD	M		AMANTRA LOVE ST...	MAKE BELIEV
21	AMANTRA HEAVEN SENT	H		AMANTRA LOVE ST...	MAKE BELIEV
22	AMANTRA LOVE STORY	M		DANICOTT BEAR BO...	AMANTRA SC
23	AMANTRA PIED PIPER	M		UNIQUE WOSHWIN	AMANTRA SA
24	AMANTRA SOMEBODY TO LOVE	H		AMANTRA WHAT A ...	AMANTRA GI

Note that to see marks in the Form View or Ped.Chart you need to select “Show Marks as colored background” from the combobox in the toolbar 

.

11.2 Primary and Secondary

Two important concepts regarding marks are:

- there is always one “primary” and one “secondary” mark color; and
- the logical operations AND and OR apply only to the currently selected primary and secondary marks

There are a number of mark commands available, eg mark ancestors or mark substring – the result of these operations is always to mark in the current primary color.

When logical operations are performed the result is also in the primary color. If AND is selected via **MARK-Primary AND Secondary** then a record will be marked in the primary color only if it had both the primary and secondary colors.

11.3 Combining Marks

As mentioned in the previous section, marks can be combined in logical operations. The two binary operations available are AND and OR which are accessible via the **MARK- Primary AND Secondary** and **MARK- Primary OR Secondary** commands. Both operations only apply to marks in the current primary and secondary colors – all other color marks are left unchanged. When ANDing only a record which is marked in both the primary and secondary will be marked in the primary color – for all other cases both primary and secondary marks will be removed.

In the case of OR-ing the marks together, a record will be marked in the primary color is either the primary or secondary marks is present. Effectively all marks in the secondary color are removed or converted to the primary color.

One other important “logical” operation is **MARK-Invert**. This will invert that primary mark state of the currently selected records so that if it was marked in the primary color it will not be after the operation and vice versa. The **MARK-Invert All** is similar except that it applies to all records in the current table.

If the records are filtered or sorted then the **MARK-Invert** command will be correctly applied to the records selected. This can be useful for marking records which have certain substrings in fields or ranges of values or combination of both.

The **MARK-Clear** and **MARK-Clear All** commands are also available and they simply clear marks in the primary color in the selected records. A separate command **MARK-Clear All Colors** will remove all marks of all colors from all records.

11.4 Toolbar Buttons

The mark toolbar buttons in the Grid View are shown below:

The left most button is the primary mark color, the right is the secondary color. Click the drop down to show a list and click on a list item to change to that color.

11.5 Mark Menu Commands

There are many commands available as described in the *User Reference* but some examples of what can be accomplished are listed in the following sections.

11.5.1 Marking Ancestors

Select the name of the entry whose ancestor you wish to mark, then select **Ancestors** from the Mark menu. Note this command works on the record which is currently selected.

11.5.2 Marking Descendants

Select the entry whose descendants you wish to mark then select **Descendants** from the Mark menu then choose an item from the sub menu, viz. 1st, 2nd, 3rd, 4th, All, Male Line, Female Line. All descendants up to and including the selected generation will be marked.

Note that the Male Line will mark the direct male line of descent and similarly for the Female line. It is crucial for both of these commands, that the sex field be correctly set to M for male and F for female.

11.5.3 Mark Siblings

This command operates on the listed entry in the edit box on the toolbar. It will display a sub menu offering a choice of : Sire Only, Dam Only, Sire and Dam, Sire or Dam. If you select "Sire Only" then only entries which have the same sire are marked. and similarly for "Dam Only". If you select "Sire and Dam", then only entries which have both the same sire and dam will be marked. If you select "Sire or Dam" then entries which have the same sire or dam will be marked.

11.5.4 Mark Duplicates in selected field

This command is useful for identifying duplicates in a particular field, e.g. Registration. First select any cell in that field, then use MARK-Duplicates in selected field, then right click on the same field and select “Sort Ascending”. Any duplicates will be marked and will appear in pairs.

11.5.5 Mark All Ancestors

This command will mark the ancestor of all the currently marked records.

11.5.6 Mark All Descendants

This command will mark the descendants of all the currently marked records.

11.5.7 Mark Common Ancestors

This is a very powerful command (but also a slow command because of the thoroughness of the search) which will, for every entry marked in the primary color, follow its ancestry and find if one or more common ancestors exist, and then mark them in the secondary color.

This could be useful for example if you wanted to check if there was in fact a single common ancestor for all carriers of a genetic disease - this could be done by first marking the carriers using **Mark Substring**. The carriers would then be marked in red - next call **Mark Common** - and all of the lowest common ancestors will be marked in blue.

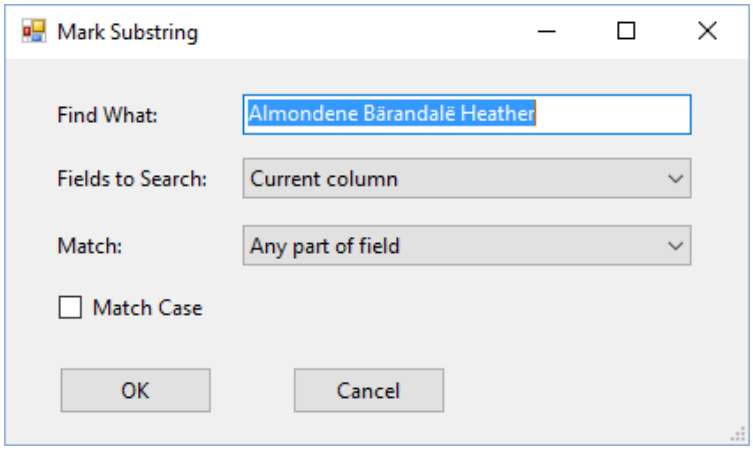
If only one entry is marked in blue then all carriers can be traced back to a single carrier.

11.5.8 Clear All

This command removes all marks from all fields of all entries.

11.5.9 Mark Substring

Click on any cell in the field to search then enter the string to search for in the Edit Bar and then choose **Substring** from the MARK menu. A dialog appears as shown below.



The dialog has the following:

- "Find What" edit box where you insert the substring to search for
- "Fields to Search" combo. You can select to search the currently select column, selected cells or all columns
- "Match" combo – you can select "Any part of field", "Whole Words", "Whole Cell", "Regular Expression"
- "Match Case" option. Tick this is you want the case to be matched, untick if you want case insensitive.

After clicking on the OK button this function searches the selected fields in the current table to find and mark all records that contain the string entered in "Find What". For example if we select the sire field in the Pedigree table and type "Almondene" in the edit box then all records whose sire field has an Almondene in it will be marked.

If you only wanted to mark records where the Sire name is exactly "Crystal" and not names that contained "Crystal" then use the "Whole Cell" option.

11.5.10 Mark all Show Champions

Click on a cell in the Show Titles field which contains "CH" or whichever show title you wish to mark. This will then appear in the Edit Box. Now select **MARK-Substring**. This will now mark all entries who have the string "CH" in their Show Title field. Note that the **Mark Substring** has options for case sensitive or whole word.

12 Filtering / Sorting

The filtering and sorting commands are useful for looking at a subset of the data or seeing it in ascending/descending order.

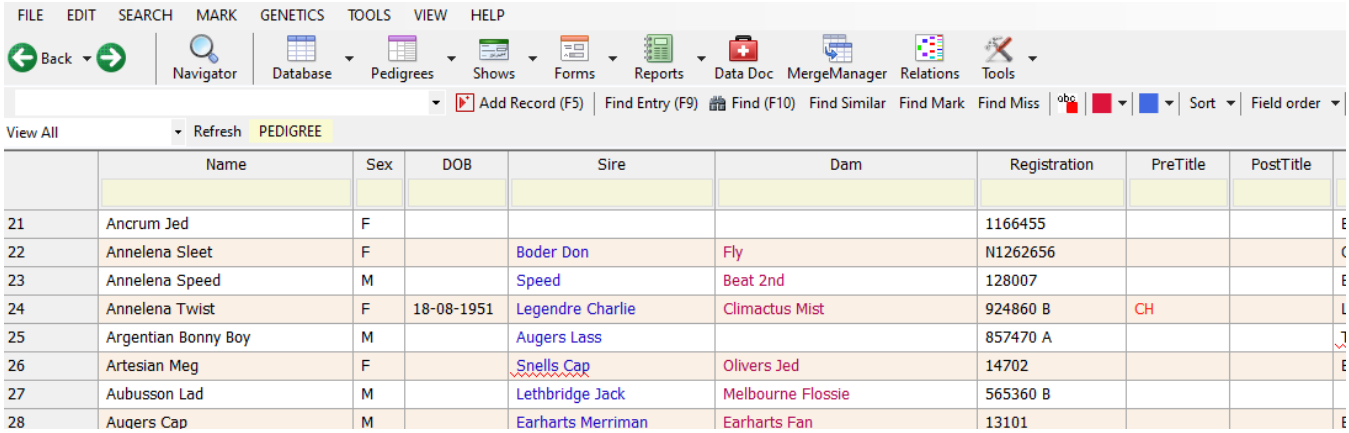
12.1 Sorting

To sort on a particular field simply right click on any cell in that field then select **Sort ascending** or **Sort descending**. To view the records in their native order, i.e. the order in which they were added right click and select **No sorting**.

Sorting on the Name or first field will be very fast as an "index" already exists for this field. Sorting on any other field may take a few seconds.

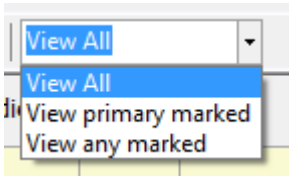
12.2 Filtering

The records displayed in the grid view can be filtered using the filtering feature. The top of each column contains a "filter box". Type into this and hit Enter to see only those records which contain the typed test in that column.



	Name	Sex	DOB	Sire	Dam	Registration	PreTitle	PostTitle
21	Ancrum Jed	F				1166455		
22	Annelena Sleet	F		Boder Don	Fly	N1262656		
23	Annelena Speed	M		Speed	Beat 2nd	128007		
24	Annelena Twist	F	18-08-1951	Legendre Charlie	Climactus Mist	924860 B	CH	
25	Argentian Bonny Boy	M		Augers Lass		857470 A		
26	Artesian Meg	F		Snells Cap	Olivers Jed	14702		
27	Aubusson Lad	M		Lethbridge Jack	Melbourne Flossie	565360 B		
28	Augers Cap	M		Earharts Merriman	Earharts Fan	13101		

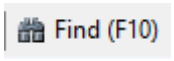
Another way to view a particular subset of your data first mark them in the primary mark color then from the toolbar combo select **View primary marked** as shown below:



To stop filtering select **View All**.

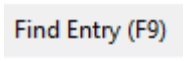
13 Finding and Replacing

13.1 Fast Find

To quickly search for a cell in the Grid view which contains a search string, first type the string in the edit box on the toolbar then hit the F10 key or click on the 

button on the toolbar. Hold down the SHIFT key when clicking on this button to search in the backward direction.

This will search the database in the forward direction from the current position, i.e. the currently highlighted entry. It searches the name, sire and dam fields for an entry that matches the text in the Edit Box. The text only needs to match part of the names, e.g. if the Edit Box contained the text “Mac” then this would match “MacSpade”, “MacDowel”, “Bemaced” etc. If it does not find a match it starts searching again from the top of the file until it returns to the current position. If no match is found a dialog box with the message “No occurrences of string found” is issued.

If you want to find the record for a particular sire, dam, owner, breeder or other “linked” field simply click on a cell containing the name (or type the name in the edit box) and use F9 of the 

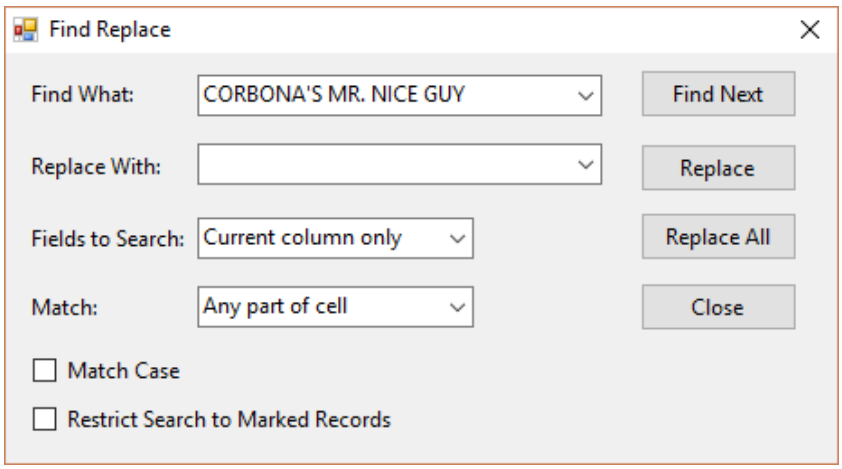
button.

13.2 Change all occurrences of one string with another

Use the **Find Replace** command from the **Search** menu or hit F12. Fill in the “Find What” and "Replace With" fields and select “Replace All”.

Alternatively use the Replace button to change just the next occurrence of the string. The database view will automatically step to that field and display it. Clicking on Find Next will simply display the next found occurrence of the string without replacing anything.

Figure 12.1



The “Fields to Search” combo has the following options:

- Current column only – only cells in the current column will be searched. Note the whole column doesn’t need to be selected. It is sufficient to select one cell.
- Currently selected cells – only the currently selected cells will be searched. The cells can span multiple columns and rows.
- All columns – the entire database will be searched. Note if “Restrict Search to Marked Records” is selected then only marked records will be searched.

The “Match String” combo has the following options:

- Any part of cell – matches if the string is found in any part of the cell

- Whole words – only matches if the matching string which is found is a whole word, i.e. it is at the start of finish of a cell or is bounded by spaces.
- Whole cell – matches only if the whole cell matches.
- Regular Expression – matches special character sequences

The “Restrict Search to Marked records” option is useful for more complex search and replace, e.g. you may want the replace function to only occur on records that are from imported UK dogs - in this case just do a Mark Substring on “UK” in the “Imported” field before doing your search and replace.

13.3 Regular Expressions

Also referred to as “regex” this is a great way of matching complicated sequences of characters. For example lets say you wanted to get rid of a string at the end of each sire or dam like “(AG12345)” except the number in parantheses could be any number. You could either manually change each one or just use one regex to change them all. In this case the matching regex is “\(\w*\)”. The \ or slosh in front of the parentheses is to “escape” them because parentheses have special meaning in regex. So \(just means (. The \w means match any alphanumeric characters, i.e. a-z, A-Z and 0-9. The * means match any number of the previous character. If you search for regex on the internet you will find may detailed descriptions of this feature. A more complete reference can be found by Googling “C# regex”.

Note: double quotes may be escaped by doubling them: "<a href=""...>"

Character	**Description**
\	Marks the next character as either a special character or escapes a literal. For example, "n" matches the character "n". "\n" matches a newline character. The sequence "\\" matches "\" and "\(" matches "(".
^	Depending on whether the MultiLine option is set, matches the position before the first character in a line, or the first character in the string.
$	Depending on whether the MultiLine option is set, matches the position after the last character in a line, or the last character in the string.
*	Matches the preceding character zero or more times. For example, "zo*" matches either "z" or "zoo".
+	Matches the preceding character one or more times. For example, "zo+" matches "zoo" but not "z".
?	Matches the preceding character zero or one time. For example, "a?ve?" matches the "ve" in "never".
.	Matches any single character except a newline character.
(pattern)	Matches pattern and remembers the match. The matched substring can be retrieved from the resulting Matches collection, using Item [0]...[n]. To match parentheses characters ( ), use "\(" or "\)".
(?<name>pattern)	Matches pattern and gives the match a name.
(?:pattern)	A non-capturing group
(?=...)	A positive lookahead
(?!...)	A negative lookahead

(?<=...)	A positive lookbehind .
(?<!...)	A negative lookbehind .
x|y	Matches either x or y. For example, "z|wood" matches "z" or "wood". "(z|w)oo" matches "zoo" or "wood".
{n}	n is a non-negative integer. Matches exactly n times. For example, "o{2}" does not match the "o" in "Bob," but matches the first two o's in "foooood".
{n,}	n is a non-negative integer. Matches at least n times. For example, "o{2,}" does not match the "o" in "Bob" and matches all the o's in "foooood." "o{1,}" is equivalent to "o+". "o{0,}" is equivalent to "o*".
{n,m}	m and n are non-negative integers. Matches at least n and at most m times. For example, "o{1,3}" matches the first three o's in "fooooood." "o{0,1}" is equivalent to "o?".
[xyz]	A character set. Matches any one of the enclosed characters. For example, "[abc]" matches the "a" in "plain".
[^xyz]	A negative character set. Matches any character not enclosed. For example, "[^abc]" matches the "p" in "plain".
[a-z]	A range of characters. Matches any character in the specified range. For example, "[a-z]" matches any lowercase alphabetic character in the range "a" through "z".
[^m-z]	A negative range characters. Matches any character not in the specified range. For example, "[m-z]" matches any character not in the range "m" through "z".
\b	Matches a word boundary, that is, the position between a word and a space. For example, "er\b" matches the "er" in "never" but not the "er" in "verb".
\B	Matches a non-word boundary. "ea*r\B" matches the "ear" in "never early".
\d	Matches a digit character. Equivalent to [0-9].
\D	Matches a non-digit character. Equivalent to [^0-9].
\f	Matches a form-feed character.
\k	A back-reference to a named group.
\n	Matches a newline character.
\r	Matches a carriage return character.
\s	Matches any white space including space, tab, form-feed, etc. Equivalent to "[\f\n\r\t\v]".
\S	Matches any nonwhite space character. Equivalent to "[^ \f\n\r\t\v]".
\t	Matches a tab character.
\v	Matches a vertical tab character.
\w	Matches any word character including underscore. Equivalent to "[A-Za-z0-9_]".
\W	Matches any non-word character. Equivalent to "[^A-Za-z0-9_]".
\num	Matches num, where num is a positive integer. A reference back to remembered matches. For example, "(.)\1" matches two consecutive identical characters.
\n	Matches n, where n is an octal escape value. Octal escape values must be 1, 2, or 3

	digits long. For example, "\11" and "\011" both match a tab character. "\0011" is the equivalent of "\001" & "1". Octal escape values must not exceed 256. If they do, only the first two digits comprise the expression. Allows ASCII codes to be used in regular expressions.
\xn	Matches n, where n is a hexadecimal escape value. Hexadecimal escape values must be exactly two digits long. For example, "\x41" matches "A". "\x041" is equivalent to "\x04" & "1". Allows ASCII codes to be used in regular expressions.
\un	Matches a Unicode character expressed in hexadecimal notation with exactly four numeric digits. "\u0200" matches a space character.
\A	Matches the position before the first character in a string. Not affected by the MultiLine setting
\Z	Matches the position after the last character of a string. Not affected by the MultiLine setting.
\G	Specifies that the matches must be consecutive, without any intervening non-matching characters.

13.4 Finding the Sire or Dam's or Owner's etc Record

This command is great for finding the matching entry for sires and dams, owners, breeders and in fact any of the linked fields (i.e. those which have a foreign key - remember you can add a foreign key to any field).

use **SEARCH-Find Key**. This causes the database view to jump to the matching entry - even if it is in a different table, e.g. if you select owner then **SEARCH-Find Key** - you will wind up at the Owner's record in the Contacts table.

13.5 Find 'Similar' Strings

Click on the **Find Similar** button to find a cell with a closely matching name. This command is particularly good at finding matches which differ only due to spelling or typographical errors.

13.6 Finding Marked Entries

The **Find Mark** command will search forward from the current position to find the next entry marked with the current primary mark, i.e. the left hand mark button's color on the toolbar  .

13.7 Change Case

The **EDIT-Change Case** command can be used to change the case of the currently selected cells. The options are to change to Upper, Lower and Title. Title case means each new word is capitalised.

When title case is selected, the operation is slightly more complex than just making the first letter of each new word a capital. It does capitalise O'Hara (i.e. the H after the quote), after a '-' (hyphen), after a '.' (dot), after Mc, and roman numerals. It specifically ignores these keywords: 'the', 'of', 'von', 'der', 'vd'.

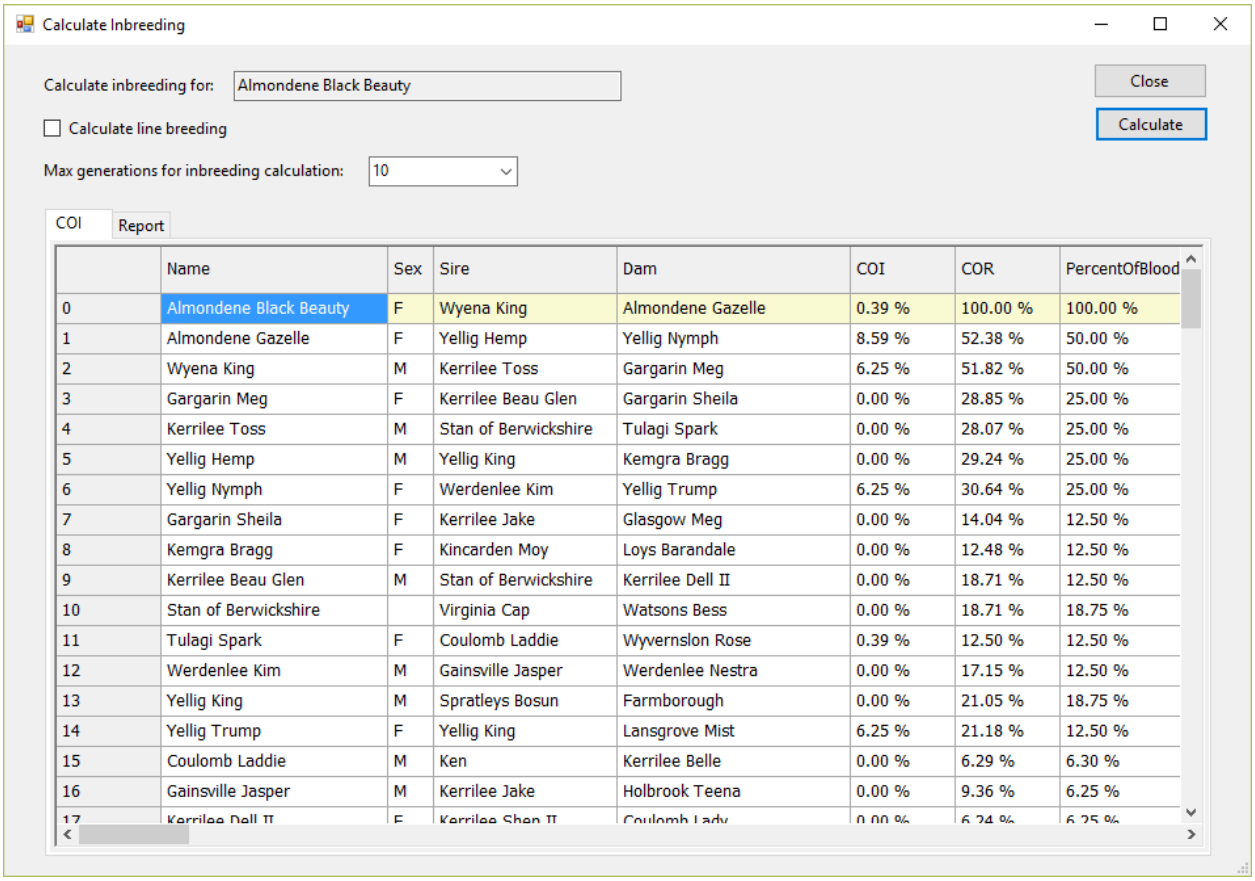
14 Genetics

An animal's **Inbreeding Coefficient** (Wright's Coefficient, or, **COI or F**) is a numerical value that responds to the presence of common ancestors on both the dam's and the sire's side of the animal's pedigree. The Inbreeding Coefficient is expressed as a percentage. The more common ancestors there are in a pedigree, and the closer they are in terms of generations to their descendant, the higher the Inbreeding Coefficient of that descendant.

The **Relationship Coefficient** (**COR or just R**) estimates the probable percentage of genes passed down from a particular common ancestor.

14.1 Calculate Inbreeding

PedCloud calculates both Inbreeding and Relationship Coefficients. Select a name in the Grid view and choose **GENETICS-Calculate Inbreeding**. A dialog appears:



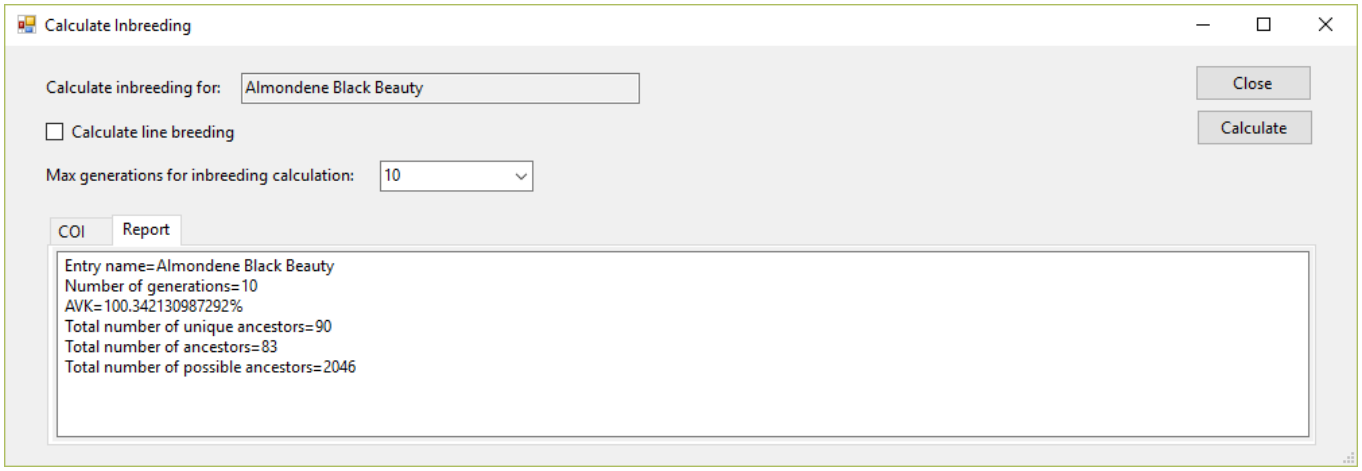
	Name	Sex	Sire	Dam	COI	COR	PercentOfBlood
0	Almondene Black Beauty	F	Wyena King	Almondene Gazelle	0.39 %	100.00 %	100.00 %
1	Almondene Gazelle	F	Yellig Hemp	Yellig Nymph	8.59 %	52.38 %	50.00 %
2	Wyena King	M	Kerrilee Toss	Gargarin Meg	6.25 %	51.82 %	50.00 %
3	Gargarin Meg	F	Kerrilee Beau Glen	Gargarin Sheila	0.00 %	28.85 %	25.00 %
4	Kerrilee Toss	M	Stan of Berwickshire	Tulagi Spark	0.00 %	28.07 %	25.00 %
5	Yellig Hemp	M	Yellig King	Kemgra Bragg	0.00 %	29.24 %	25.00 %
6	Yellig Nymph	F	Werdenlee Kim	Yellig Trump	6.25 %	30.64 %	25.00 %
7	Gargarin Sheila	F	Kerrilee Jake	Glasgow Meg	0.00 %	14.04 %	12.50 %
8	Kemgra Bragg	F	Kincarden Moy	Loys Barandale	0.00 %	12.48 %	12.50 %
9	Kerrilee Beau Glen	M	Stan of Berwickshire	Kerrilee Dell II	0.00 %	18.71 %	12.50 %
10	Stan of Berwickshire		Virginia Cap	Watsons Bess	0.00 %	18.71 %	18.75 %
11	Tulagi Spark	F	Coulomb Laddie	Wyvernslon Rose	0.39 %	12.50 %	12.50 %
12	Werdenlee Kim	M	Gainsville Jasper	Werdenlee Nestra	0.00 %	17.15 %	12.50 %
13	Yellig King	M	Spratleys Bosun	Farmborough	0.00 %	21.05 %	18.75 %
14	Yellig Trump	F	Yellig King	Lansgrove Mist	6.25 %	21.18 %	12.50 %
15	Coulomb Laddie	M	Ken	Kerrilee Belle	0.00 %	6.29 %	6.30 %
16	Gainsville Jasper	M	Kerrilee Jake	Holbrook Teena	0.00 %	9.36 %	6.25 %
17	Kerrilee Dell II	F	Kerrilee Shep II	Coulomb Lady	0.00 %	6.24 %	6.25 %

Select the number of generations to use when calculating then click on the Calculate button. A list of ancestors will appear with the following information columns:

- **COI** – Coefficient of Inbreeding
- **COR** – Coefficient of Relationship.
- **Count** – number of times the ancestor appears in the pedigree.
- **MinGen** – the lowest generation at which that ancestor appears.
- **LineBreeding** – this is a string A, B, C – X, Y, Z where A, B, C are a list of generations at which the ancestor appears on the sire's side and X, Y, Z are the generations at which the ancestor appears on the dam's side.

If your database is large, and extends back for many generations, the calculation may take some time. The default number of generations used during the calculation is 10. You can change this in the Inbreeding dialog box and you can also select to have the ancestors used in the calculation marked.

Note that in the above screen shot there is also a Report tab. Clicking on this will display other information as shown below. Most of the report data is self explanatory except for the AVK which is defined as (TotalPossibleNumberOfAncestors – NumberOfRepeats)/ TotalPossibleNumberOfAncestors expressed as a percentage. 100% indicates no repeats, while lower figures indicate more repeated ancestors.



Note: For maximum accuracy use the highest number of generations possible without an out of memory error.

Warning. A common mistake with beginners is to enter "Unknown Sire" in a sire or "Unknown Dam" in a dam field. Unfortunately for the purposes of calculating COI this would be interpreted as an ancestor called "Unknown Sire/Dam" which appears all over the place and would result in a an unusually high COI. You may however use "Unknown" (case insensitive) or any name beginning with a # as these will not be interpreted as an entry name and hence will not affect the COI calculation, e.g. "#Unknown Sire" and "#Unknown Dam" are treated as though they are blank.

The Inbreeding dialog does not allow printing. If you wish to print then please use the Breeding Planner described in the next section.

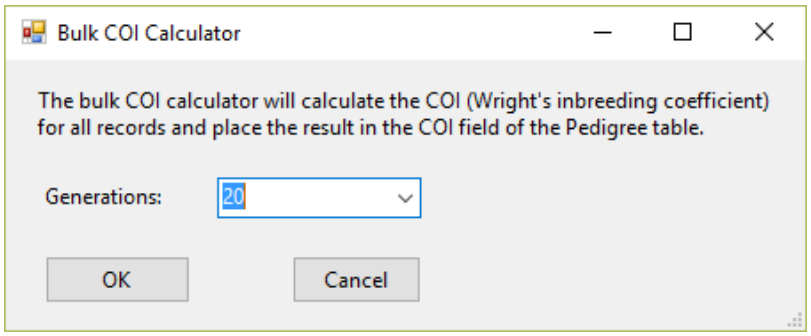
Note: PedCloud may not be able to calculate COI if there is self-parenting, in other words if the entry or one of its ancestors is also an ancestor of itself.

14.2 Calculate Inbreeding for All

The **GENETICS-Calculate Inbreeding for All** command will calculate the COI for all records in the database in one go. This is obviously faster than running the **GENETICS -Calculate Inbreeding** command on each record but it has the disadvantage that it only calculates COI whereas **GENETICS -Calculate Inbreeding** also calculates the COR, line breeding etc for each ancestor.

The Bulk COI dialog is shown below and allows setting the number of generations to calculate the COI for.

The default number of generations is "All" which is the most accurate and also for large databases can be 20 – 100 times faster.



Another feature of Bulk COI is that it will remove any self-parenting. It uses an algorithm to make a best guess about what links to remove but note: it may not necessarily be the correct links being removed.

To see details on what links were removed, in Grid view, click **VIEW-Events**. Below is an example of the Events view showing a listing of what links where removed for a database with self-parenting. You could use this as a guide to find where the self-parenting is.

	Date Time	Module	Message
0	17/11/2013 14:16:0	CObject	CreateTreeNode() execution time=1.05001 sec, 2847 ancestors.
1	17/11/2013 14:16:0	CObject	There is self-parenting in this database, temporary link removals are listed below.
2	17/11/2013 14:16:0	CObject	Removed the dam from record 'tatiana of shelaghdare'.
3	17/11/2013 14:16:0	CObject	Removed the dam from record 'tyegarth famous grouse'.
4	17/11/2013 14:16:0	CObject	Removed the sire from record 'pensing molly mischief'.
5	17/11/2013 14:16:0	CObject	CreateSortedAncestors() execution time=0.0862877 sec, 17 loops.
6	17/11/2013 14:16:0	CObject	CreateSiblings() execution time=0.000260802 sec, 0 siblings.
7	17/11/2013 14:16:0	CObject	Distance calculation time=0.34261 sec.
8	17/11/2013 14:16:0	CObject	COI calculation time=0.584876 sec.
9	17/11/2013 14:16:0	CObject	Transfer results time=0.210116 secs.

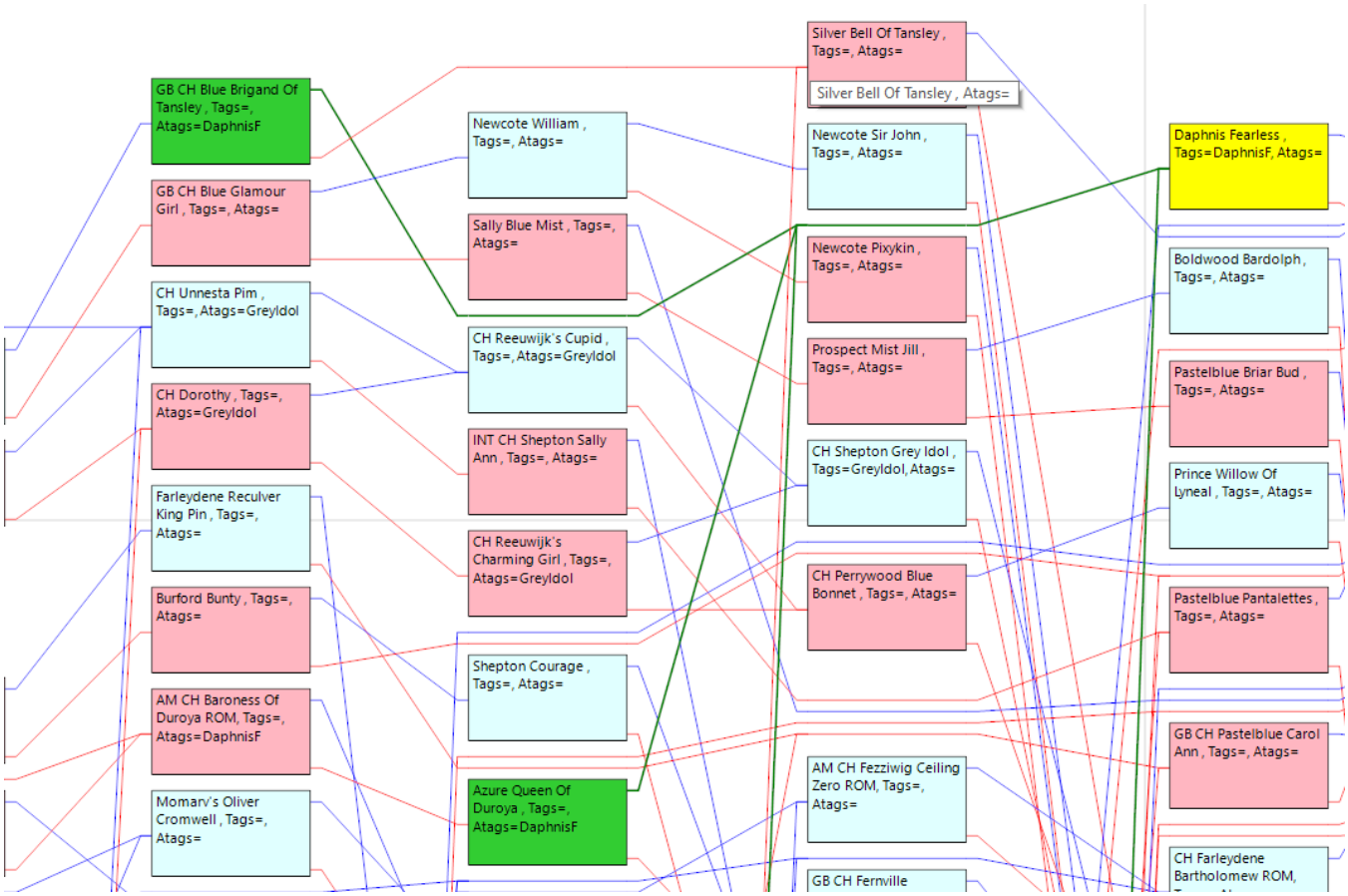
14.3 Calculate Inheritance for All

This **GENETICS-Calculate Inheritance for All** command requires two columns in the Pedigree table: “Tag” and “Ancestor Tags”. The idea is that for any *significant ancestor* you put one or more unique, short names separated by commas, in the Tag column. The **GENETICS-Calculate Inheritance for All** command then runs through every record in the pedigree table. If the record has something in its Tag column, it puts those tags in the “Ancestor Tags” column of any entry that is descended from it. After the command is run, you can immediately see if any given entry is descended from a particular tagged ancestor or has particular tags. What you put in the Tags column could be either the short unique tag name for a significant ancestor or you could choose instead to put any significant conditions, genetic or otherwise, in there.

The “Ancestor Tags” field of course can also be added to pedigree reports.

If your pedigree table does not have columns for “Tag” and “Ancestor Tags” then you will be prompted as to whether you want to add them, if yes then they will be automatically added.

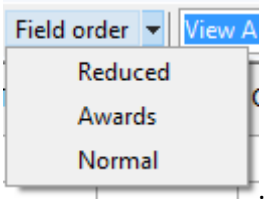
The screenshot below shows a small part of a PedChart. We temporarily changed the Expression for the node to show the “Tag” and “Ancestor Tags” fields. You can see “Daphnis Feerless” has a Tag=”DaphnisF” and you can see how two of its offspring, highlited in green, have “Ancestor Tags” or Atags containing “DaphnisF”.


GB CH Blue Brigand Of Tansley , Tags=, Atags=DaphnisF
GB CH Blue Glamour Girl , Tags=, Atags=
CH Unnesta Pim , Tags=, Atags=Greyldol
CH Dorothy , Tags=, Atags=Greyldol
Farleydene Reculver King Pin , Tags=, Atags=
Burford Bunty , Tags=, Atags=
AM CH Baroness Of Duroya ROM, Tags=, Atags=DaphnisF
Momarv's Oliver Cromwell , Tags=, Atags=
Newcote William , Tags=, Atags=
Sally Blue Mist , Tags=, Atags=
CH Reeuwijk's Cupid , Tags=, Atags=Greyldol
INT CH Shepton Sally Ann , Tags=, Atags=
CH Reeuwijk's Charming Girl , Tags=, Atags=Greyldol
Shepton Courage , Tags=, Atags=
Azure Queen Of Duroya , Tags=, Atags=DaphnisF
Silver Bell Of Tansley , Tags=, Atags=
Silver Bell Of Tansley , Atags=
Newcote Sir John , Tags=, Atags=
Newcote Pixykin , Tags=, Atags=
Prospect Mist Jill , Tags=, Atags=
CH Shepton Grey Idol , Tags=Greyldol, Atags=
CH Perrywood Blue Bonnet , Tags=, Atags=
AM CH Fezziwig Ceiling Zero ROM, Tags=, Atags=
GB CH Fernville
Daphnis Fearless , Tags=DaphnisF, Atags=
Boldwood Bardolph , Tags=, Atags=
Pastelblue Briar Bud , Tags=, Atags=
Prince Willow Of Lyneal , Tags=, Atags=
Pastelblue Pantalettes , Tags=, Atags=
GB CH Pastelblue Carol Ann , Tags=, Atags=
CH Farleydene Bartholomew ROM,

15 Grid View

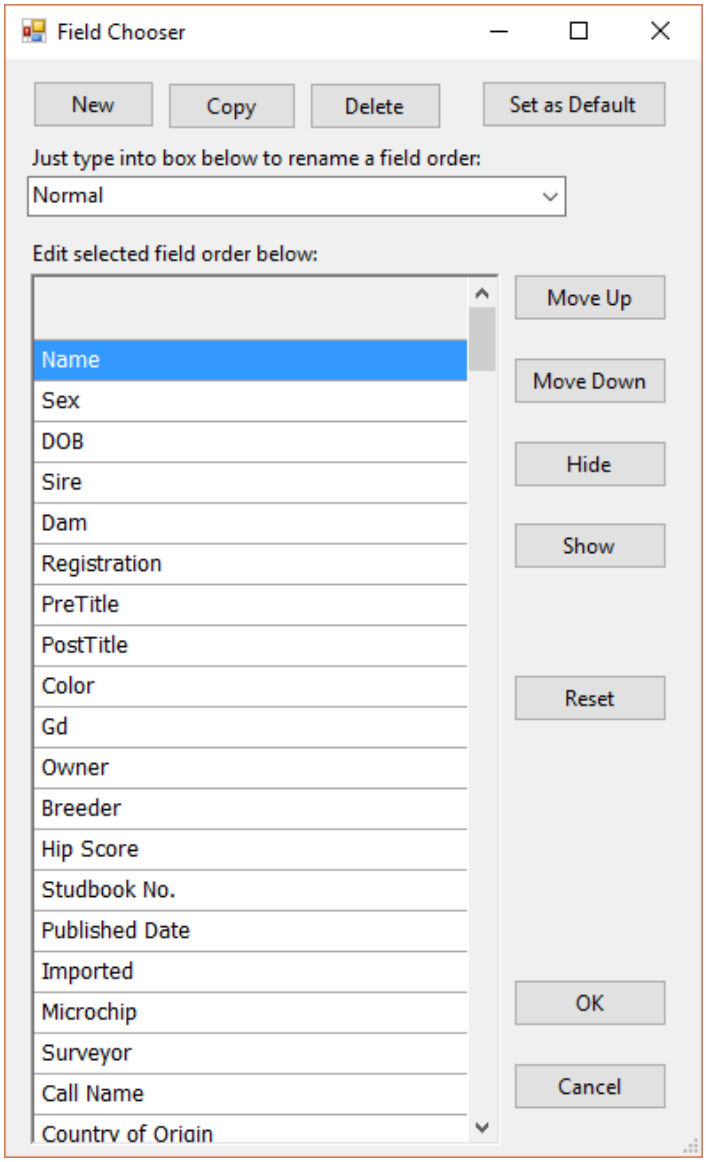
The Grid view provides a view of a multiple records and is probably the most used of all views.

15.1 Field Chooser

This is a new feature in V6.0. It allows the user to easily rearrange how fields are viewed in the Grid view and also the Navigator Edit tab if the **VIEW-Options** "Editor to use field chooser order" option is ticked. The user can define 126 different field orders and then rapidly select one from the drop down menu that appears by clicking on the toolbar button for the field chooser 

.

To start the Field Chooser dialog click on the **Field Chooser** button. The dialog appears as shown below.



The main list will list firstly the "**shown**" fields with **black text** on a light yellow background then it will list the "**hidden**" fields in a **light gray text** on a white background. Note only "shown" fields are displayed in the Grid view.

The top part of the dialog is for creating new field orders, deleting them, renaming then or setting on as the default, i.e. the one that will be used in the Grid view.

The following operations are possible:

- Create a new field order – click on the **New** button then type the name of this field order.
- Copy any field order – simply select the existing order you want to copy and click on the **Copy** button.
- Change the name of any field order – click on the field order then click in the edit box part of the combo, start typing the name and hit Enter.
- Delete a field order – select the order then hit the Delete button.

The basic operations of Move Up/Down and Hide can be applied to multiple fields. To select multiple fields, click in the first field in the range, then holding the mouse button down, drag and release it in the last field in the range.

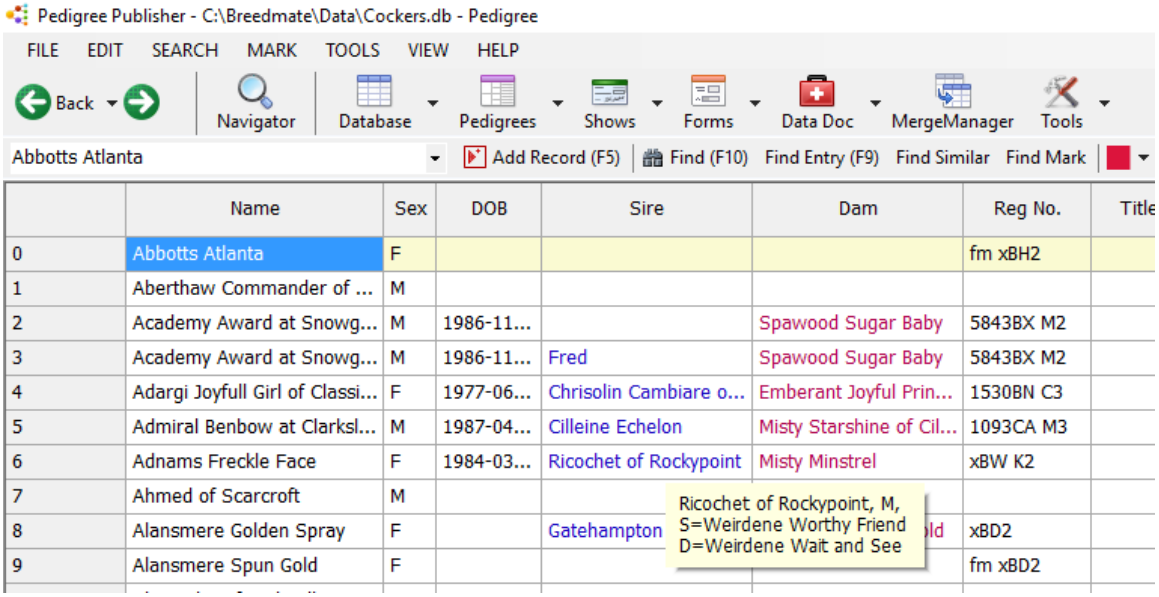
The dialog buttons works as follows:

- Move Up /Down – The selected fields are moved up/down one position (on the Grid they will be moved left/right). The Move Up/Down button can be pressed as many times as required to move the fields.
- Hide – The selected fields are hidden. Note this button is disabled if any hidden fields are selected. The only way to make these fields reappear is to use the Reset button or use Insert as described below, or click on a hidden field and the click on the Show button.
- Show – The selected fields must be already hidden otherwise this button is disabled. When clicked the hidden fields will be "shown" and will be returned to their approximate normal position in the field order.
- Reset – Restores all fields to be displayed in their default order.

NOTE: the Field Chooser is also used in the **TOOLS-Export CSV** dialog to select what fields are exported.

15.2 Multiline Tooltips

When floating over a linked grid cell such as sire or dam a tooltip appears displaying additional information as shown below:



	Name	Sex	DOB	Sire	Dam	Reg No.	Title
0	Abbotts Atlanta	F				fm xBH2	
1	Aberthaw Commander of ...	M					
2	Academy Award at Snowg...	M	1986-11...		Spawood Sugar Baby	5843BX M2	
3	Academy Award at Snowg...	M	1986-11...	Fred	Spawood Sugar Baby	5843BX M2	
4	Adargi Joyfull Girl of Classi...	F	1977-06...	Chrisolin Cambiare o...	Emberant Joyful Prin...	1530BN C3	
5	Admiral Benbow at Clarksl...	M	1987-04...	Cilleine Echelon	Misty Starshine of Cil...	1093CA M3	
6	Adnams Freckle Face	F	1984-03...	Ricochet of Rockypoint	Misty Minstrel	xBW K2	
7	Ahmed of Scarcroft	M					
8	Alansmere Golden Spray	F		Gatehampton		xBD2	
9	Alansmere Spun Gold	F				fm xBD2	

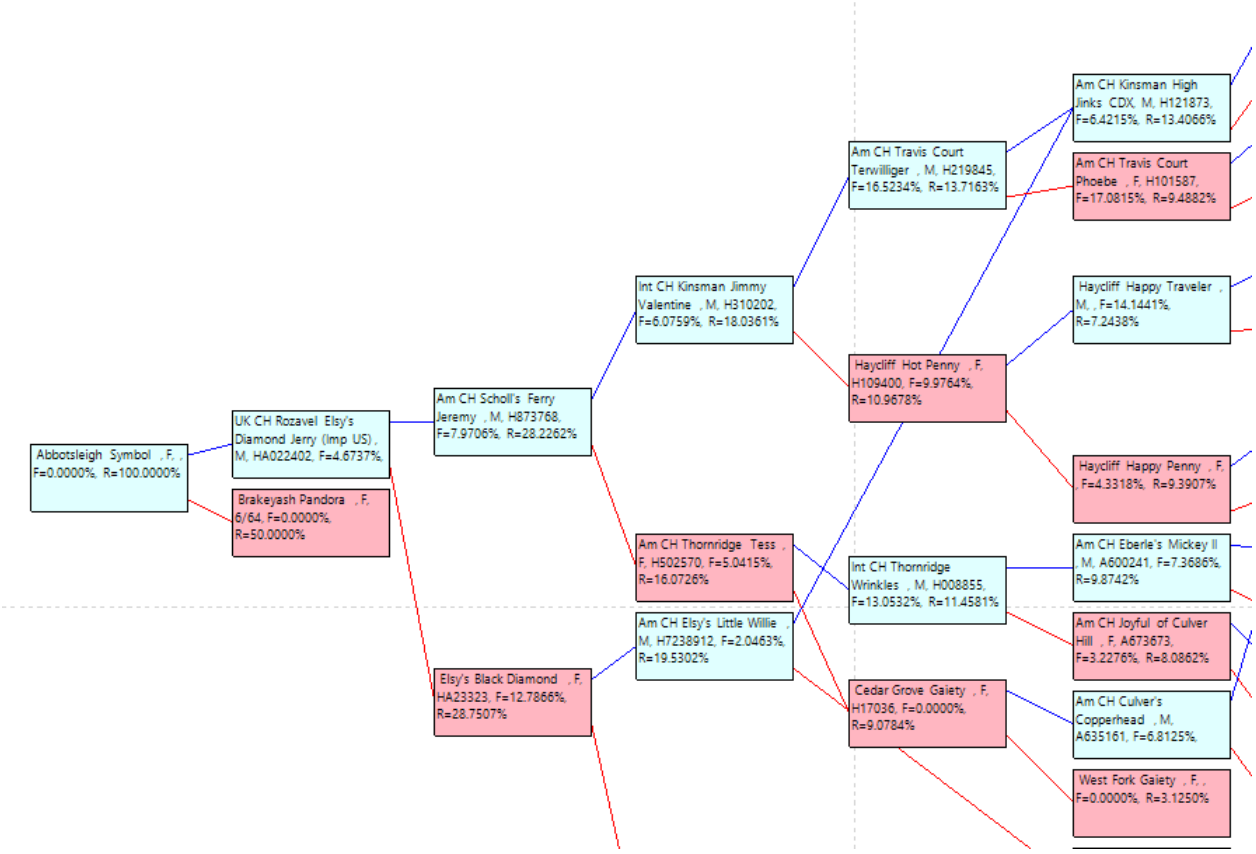
The default tooltip for the Pedigree table is "[Name], [Sex], [DOB]!S=[Sire]!D=[Dam]" with the sire and dam shown on separate lines. The information which is displayed in the tooltip can be defined by the user by using the **VIEW-Set Tooltips** command.

16 PedChart

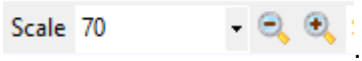
The PedChart feature is another form listed under the Pedigree button.

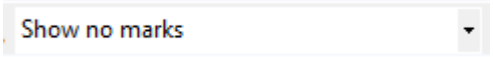
It basically displays a chart of ancestors with the repeats removed, in other words an ancestor will only ever appear once. This vastly reduces the number of ancestors and allows the Ped.Chart to display an almost unlimited number of generations of ancestors. This is more than can be displayed in any normal pedigree because the number of ancestors doubles every generation so that even for 16 generations there would be about 65,000 ancestors in a normal pedigree.

A portion of a typical chart is shown below:



Features of the chart are as follows:

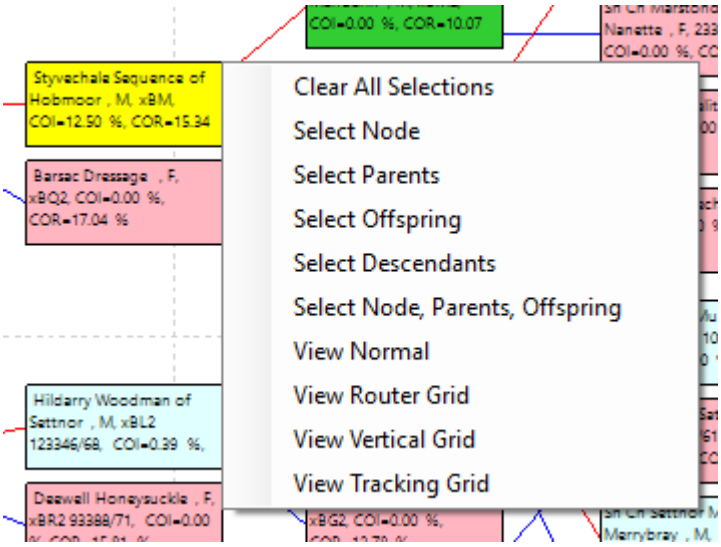
- PedCloud automatically calculates the number of pages required horizontally and vertically to display the chart. The page margins and separators are shown with dashed lines.
- The page size and orientation is set via the **FILE-Print Setup** command. Note if you change the orientation it won't be used until you recalculate the form or if you do a chart for a different entry.
- You can zoom in or out using the toolbar combo box or zoom buttons 

.
- When zooming the chart will remain <u>centered on the currently selected cell</u>.
- By default the background color of each cell will be light red for females and light blue for males. The background color of the cells can be selected via the toolbar combo: 

- Lines from a cell to its Sire are colored blue, and the line to its Dam is red.

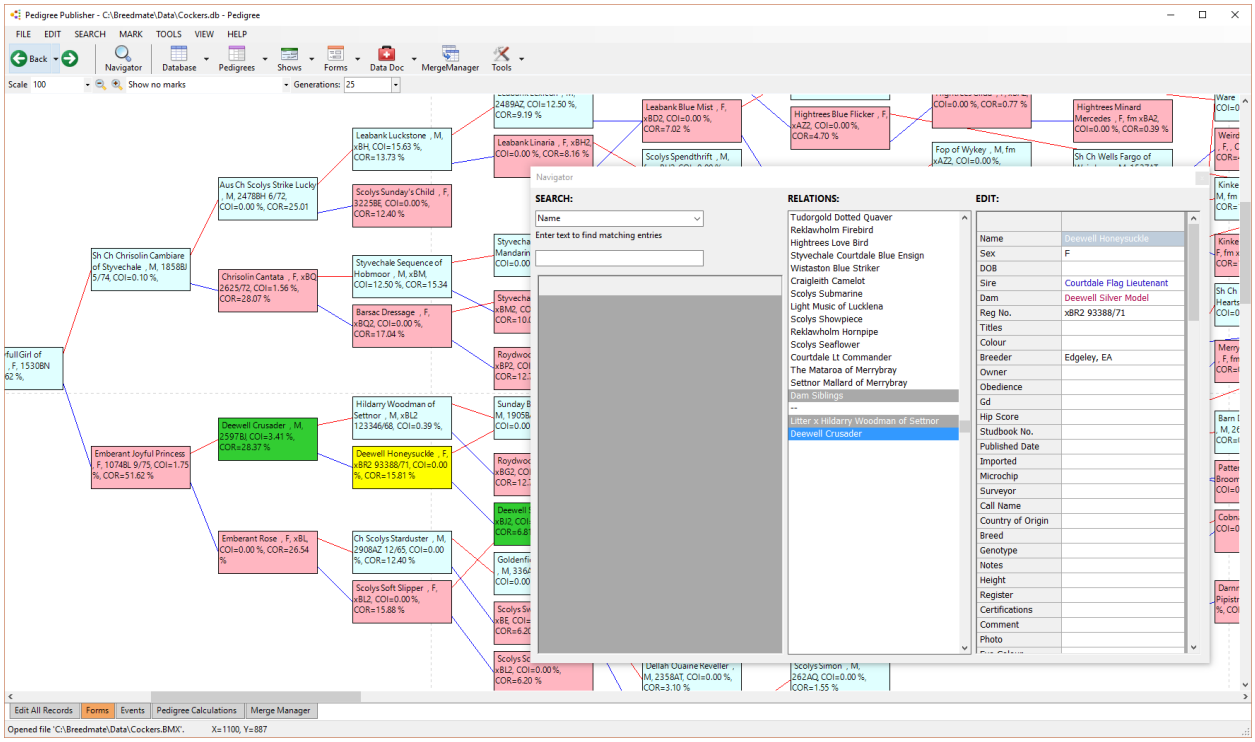
- If you float over a cell a tooltip will appear showing user selectable information about that entry. This is useful when you're zoomed out and the cells text can't be read. The **EDIT- Expressions** can be used to set which fields are displayed in the tooltip.
- If no text appears inside the boxes or you would like to see different fields appear then use the **EDIT-Expressions**. As per the previous point this menu item allows setting what information is displayed inside the box and also in the tooltip. That information can optionally include the "Inbreeding coefficient" (COI or F) and the "Relationship Coefficient" (COR or just R).
- Any name beginning with the letter # is treated specially. It is considered to be the same as blank so won't be counted as an ancestor and hence entries with these kinds of names won't appear as ancestors in this tree. They can however appear as the subject. This is useful because you can put text in a Sire or Dam field like "#Unknown" without it being considered an actual ancestor.

Some charts can be very dense and complex making it difficult to find the offspring or sire and dam. For these situations you can simply right click on a cell. A context menu appears as shown below:



16.1 Editing Data using PedChart

It is possible to see data on any cell by simply clicking on a cell and selecting the Edit tab on the Navigator. If the Navigator is not being displayed then hit F2. A typical edit session is shown below. Alternatively, right click on the cell you want to edit and select "Edit" from the context menu.



Any of the fields can be edited, but note that the chart, unlike other forms, will not automatically change.

Note that the selected node is shown in yellow and its sire in blue and dam in red and immediate offspring in green.

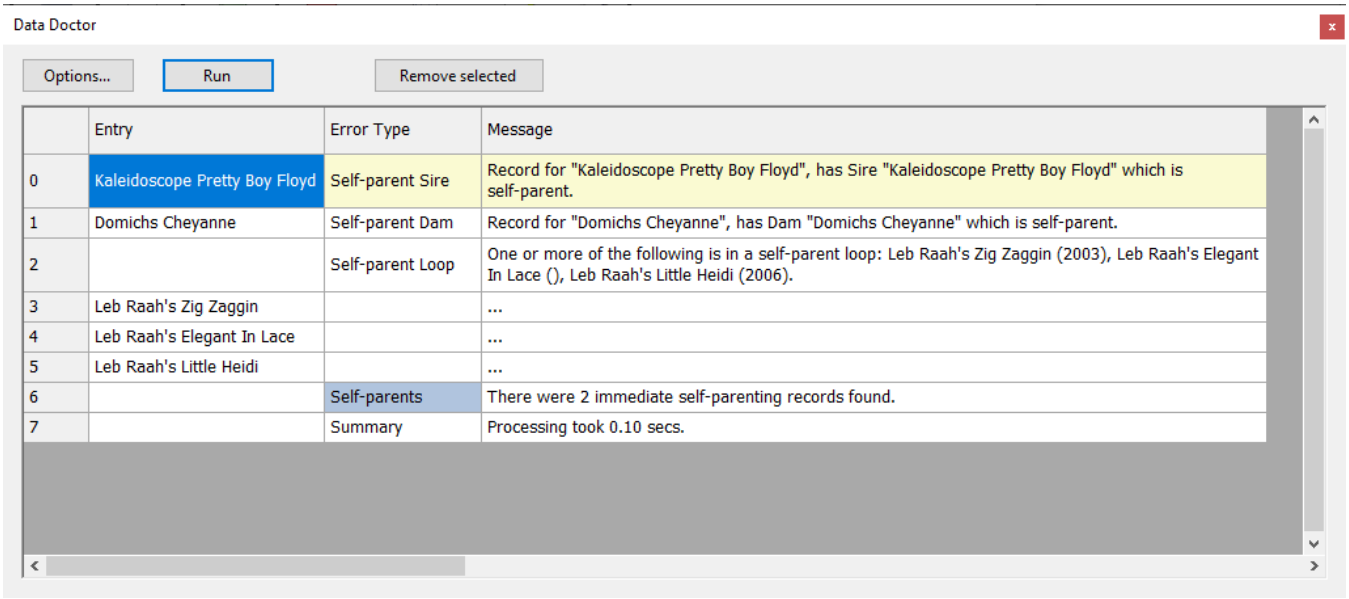
16.2 Detecting Self Parenting

Self parenting is where a record appears as an ancestor of itself. This can be very difficult to detect manually because it may only occur after 15 or more generations. The best way of detecting self parenting is to use the DataDoc and run the checks for “Born Before Parent”, “Sire/Dam Born Younger/Older than”.

Next use the DataDoc “Self parenting” test. Below is an example of running that test.

The first thing it will do in this test is to look for immediate self parenting. This is where a record with name “Fred” has a sire or dam called “Fred”. These are pretty obvious and clearly errors.

It then performs a further analysis looking for distant self parenting where an entry is it is own grand-parent or great-great etc grandparent possibly even 20 or 40 generations back. If it finds any loop **it will report only the first loop it finds**. In the example below it reported all the entries involved in that loop with the year of birth in parentheses. By clicking on each one it will jump the “Edit All records” or grid view to that entry allowing you to see the full data record and edit it if neccessary.



.

After fixing a loop you should run this test again until there are no further loops.

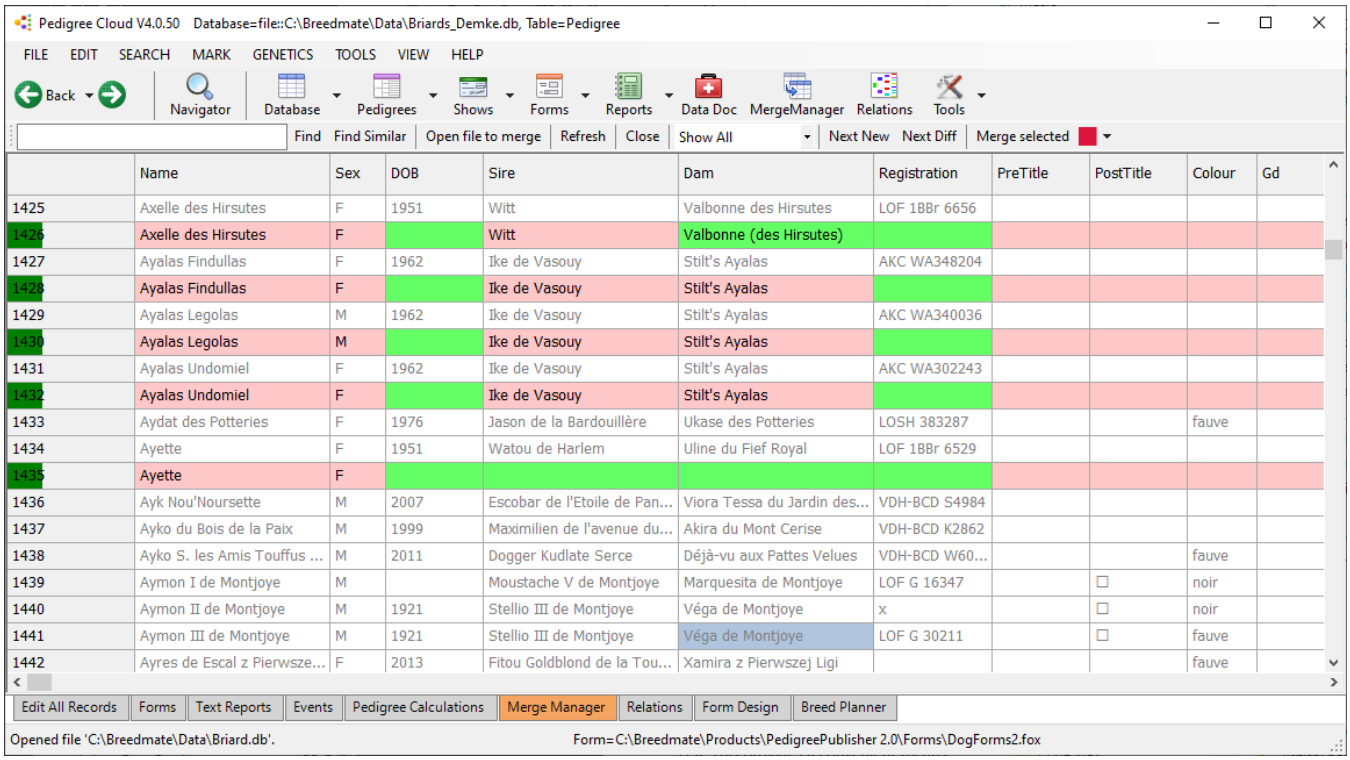
17 Merge Manager

If you need to combine two or more databases you can use the **FILE-Merge Database** command which completely automatically does a database merge. This is described in a later section so we won't go into details but the main point is it is automatic, i.e. it is not interactive.

To use Merge Manager, click on the large **Merge Manager** button on the browser bar, then click on the "**Open File To Merge**" button on the toolbar and select another database to compare to your currently open database. The view clearly shows the differences between the two databases in terms of what records are completely new in the selected database and what records differ only in certain fields.

This is a great feature for line chasers and databases maintainers. It essentially shows the differences between your current database and another selected "merge" database and provides an ability to edit data in the merge database or current database and allows interactive copying of fields or merging of individual records or a range of records.

Note when selecting a file to merge, that file must not be already open either in the current application or another application.



	Name	Sex	DOB	Sire	Dam	Registration	PreTitle	PostTitle	Colour	Gd
1425	Axelle des Hirsutes	F	1951	Witt	Valbonne des Hirsutes	LOF 1BBr 6656				
1426	Axelle des Hirsutes	F		Witt	Valbonne (des Hirsutes)					
1427	Ayalas Findullas	F	1962	Ike de Vasouy	Stilt's Ayalas	AKC WA348204				
1428	Ayalas Findullas	F		Ike de Vasouy	Stilt's Ayalas					
1429	Ayalas Legolas	M	1962	Ike de Vasouy	Stilt's Ayalas	AKC WA340036				
1430	Ayalas Legolas	M		Ike de Vasouy	Stilt's Ayalas					
1431	Ayalas Undomiel	F	1962	Ike de Vasouy	Stilt's Ayalas	AKC WA302243				
1432	Ayalas Undomiel	F		Ike de Vasouy	Stilt's Ayalas					
1433	Aydat des Potteries	F	1976	Jason de la Bardouillère	Ukase des Potteries	LOSH 383287			fauve	
1434	Ayette	F	1951	Watou de Harlem	Uline du Fief Royal	LOF 1BBr 6529				
1435	Ayette	F								
1436	Ayk Nou'Noursette	M	2007	Escobar de l'Etoile de Pan...	Viora Tessa du Jardin des...	VDH-BCD S4984				
1437	Ayko du Bois de la Paix	M	1999	Maximilien de l'avenue du...	Akira du Mont Cerise	VDH-BCD K2862				
1438	Ayko S. les Amis Touffus ...	M	2011	Dogger Kudlate Serce	Déjà-vu aux Pattes Velues	VDH-BCD W60...			fauve	
1439	Aymon I de Montjoye	M		Moustache V de Montjoye	Marquesita de Montjoye	LOF G 16347		☐	noir	
1440	Aymon II de Montjoye	M	1921	Stellio III de Montjoye	Véga de Montjoye	x		☐	noir	
1441	Aymon III de Montjoye	M	1921	Stellio III de Montjoye	Véga de Montjoye	LOF G 30211		☐	fauve	
1442	Ayres de Escal z Pierwsze...	F	2013	Fitou Goldblond de la Tou...	Xamira z Pierwszej Ligi				fauve	

A screen snapshot of a typical Merge Manager session is shown above. The display is coded as follows:

- Records from your current database are in plain white with grey text, while records from the merge database have a pink colored background with black text.
- New records have a red color in the first column, i.e. the record exists in the merge file but **not** in your current file.
- Changed records have green in the first column and the actual fields that are different are marked in bright green. **Note: If a field in your current database is non blank and the same field in the merge database is blank then they will not be shown as different.**

The usual drag and drop feature also works in this view so you can copy data from one cell and drop it another cell. This provides a convenient means of copying selected data from the merge file to your current file OR from your current file to the merge file.

Note the fields in the Merge Manager are shown in the current Field Order as specified in the Grid view. This order can be changed by going to the Grid view and selecting **TOOLS-Field Chooser**. As an added feature, when comparing the current and merge databases, only those fields in the current field order will be used. This is an easy way of restricting which fields will be used for the comparison.

The Navigator also works in this view so it is possibly to "find" any record by double clicking on the name in the Navigator.

To make it easier to use, the following shortcuts are provided:

- The **F11 key** can be used to find the next different record, i.e. a record in the merge database which is new or is different from that in the current database. This is useful in situations where a small database is being merged with a very large database and there can potentially be large gaps between changes. If the SHIFT key is held down the search proceeds backward not forwards.
- The **F10 key** will find the next new record. Its searches in the forward direction but if the SHIFT key is pressed it will search backward.
- The **F7 key** will delete the currently selected records both from the current and merge databases.

Two other toolbar buttons are:

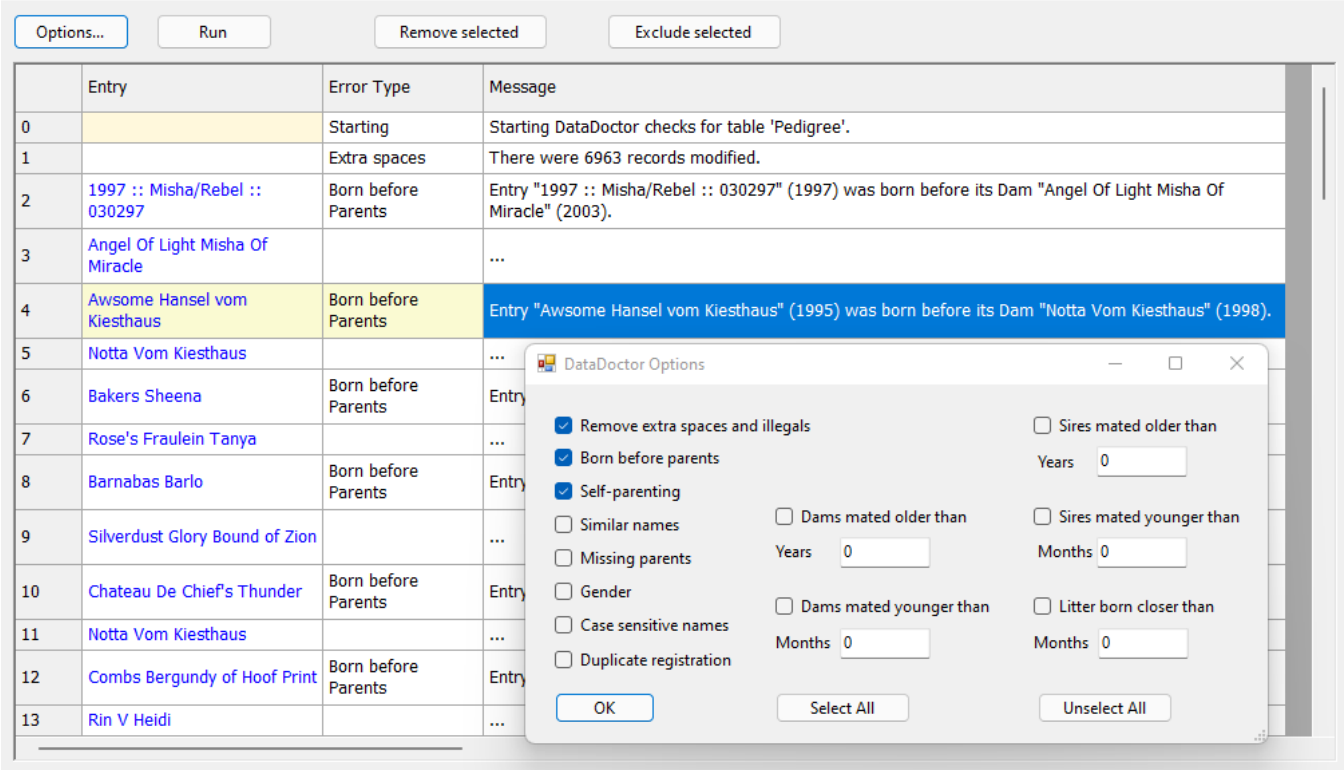
- **Refresh** - The Merge Manager will not automatically update its view if changes are made via other views, e.g. via the Grid view or Form views. To force the view to refresh click on the Refresh button.
- **Select All** – This is a combobox with choices for "Show Differences", "Show New Records", "Show New + Differences", "Show All". Selecting one of these items will change the merge view to only show the selected types of record.
- **Merge Selected** - A range of records can be merged from the merge database into the current database by selecting the first record in the range, then holding down the SHIFT key clicking on the last record in the range, then clicking on the "Merge Selected" button on the toolbar. Note: only selected records from the merge file will be merged – records from your current database are ignored.

Another feature is that **you can also make changes to the file being merged in**.

18 Data Doctor

The Data Doc feature can be accessed by pressing the 

button on the main toolbar. This feature offers the user a number of tests which can be run on their database and it presents a detailed list of any problems found. A typical screen shot is shown below. In this shot we have clicked on the Options button so we can select what tests we want to run, clicked OK, clicked Run, then clicked Options again.



To use Data Doctor, the user selects from a range of standard tests by clicking the check boxes in the Options dialog then simply clicks OK then “Run” button. There is a **Select All** and **Unselect All buttons**. All errors are neatly listed including a hyperlink to allow easy switching to the problem data. The checks are as follows:

- **Remove Extra Spaces and illegals–** This will look at every field and actually remove any extra spaces and illegal control characters anywhere in the field including at the beginning or end or in between.
- The **Born Before Parents** test checks if the DOB of both Sire and Dam of an entry is before the entry's DOB. Any name beginning with the # character will be ignored.
- **Self-parenting** check is fairly obvious. Note that if you have certain registration that you don’t want included in the test, precede them with a # character.
- **Similar Names –** checks all names (i.e. in the Name column in the Pedigree table) to see if there are other names which are similar. This test will typically turn up 100’s of similar names so you need to carefully check the lists. Note that similar names will detect similarities even if the words in the name are rearranged, e.g. Thompson’s Spot is considered similar to Spot (Thompson). The test is not case sensitive and disregards all punctuation. Similar names are not reported if the records both have non-empty and different Reg No. or DOB fields. Note this test can be very slow when run on large databases. There is a Cancel button at the bottom of the PedCloud window.
- The **Missing Parents** test checks if a Sire or Dam name does not have a matching record with that name. Any name beginning with the # character will be ignored.

- **Gender** check will check every record with a specified Sex (M or F) and check everywhere it is used as a sire or dam to make sure it's consistent. In other words, if a record is a Male then it should only be used as a Sire. A record is considered male if the Sex field begins with the letter M, S or D (case insensitive). The gender set using **VIEW-Options** is ignored.

- **Case sensitive names –** Because PedCloud desktop databases (.DB files) treat names as case sensitive, you can have records with the same name but different case so your could have records "mary lyon", "Mary Lyon", "MARY LyoN". This test will report all such duplicate names. The user needs to manually fix these by deciding which name you want to keep, copying any data from the other duplicates, then deleting the duplicates. After this is done, run this check again and it will automatically fix up all the links from the Sire and Dam fields, so if a Sire field had "fred" in it and you kept the "Fred" record (and deleted the duplicate "fred") it will change the Sire to "Fred". NOTE: MySQL databases are case insensitive.

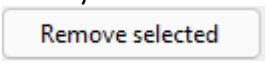
- **Litters Born Closer Than –** select the number of months in the edit box. This will check for litters born the same female which are closer than the specified number of months.

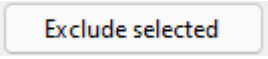
- **Dams Mated Older Than –** select the number of years in the edit box. This will check for dams that were mated older then the specified number of years. Note: it assumes a 0 gestation period.

- **Dams Mated Younger Than –** select the number of months in the edit box. This will check for dams that were mated younger then the specified number of months. Note: it assumes a 0 gestation period.

- **Sires Mated Older Than –** select the number of years in the edit box. This will check for sires that were mated older then the specified number of years. Note: its assumes a 0 gestation period.

- **Sires Mated Younger Than –** select the number of months in the edit box. This will check for sires that were mated younger then the specified number of months. Note: its assumes a 0 gestation period. This check and the previous thee checks are useful for searching for self-parenting, i.e were an animal appears as an ancestor.

As you fix the various errors you can delete any error messages by selecting one or more rows in the Data Doc view then click on the 

button to delete them. Note this does not affect any of your data. You can also permanently prevent an error message from recurring by clicking the 

button. This does require that the pedigree table has an "ExcludeChecks" column. If it doesn't, then when you click the "Exclude selected" button it will offer to add that column.

The format of the DataDoc is three columns:

- Entry name – this is one of the names involved in the issue. By clicking on it the "Edit All records" or grid view will jump to that record allowing you to view or edit it.

- Error type – this will be the name of the test that was run, or in the case of other entries reported as part of a problem it will be left blank. For example if reporting "Born before parents" the first row liss the subject and the second row the parent.

- Message is a description of the problem found.

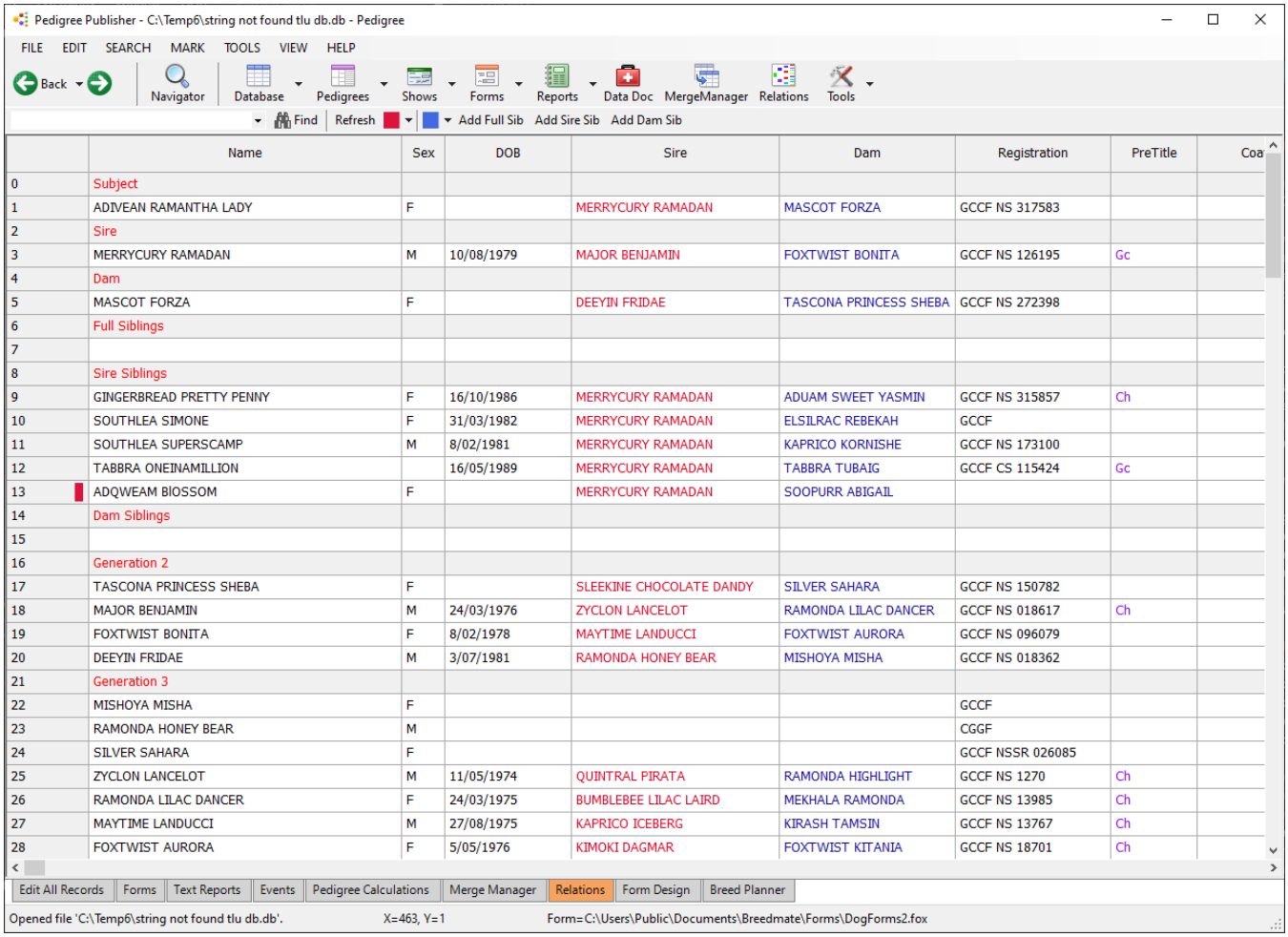
19 Relations View

To get to relations view, select a record in the Grid view and click on the large Relations toolbar button.

A sample of the view appears below.

The selected record in Grid view becomes the Subject. The grid is divided into Sire, Dam, Full Siblings, Sire Siblings, Dam Siblings, then the offspring divided by generation.

The toolbar allows finding by entering the search text in the toolbar combobox and click Find. Records can be marked using either the primary or secondary mark buttons. Add Full Sib, Add Sire Sib and Add Dam Sib will add the appropriate siblings to the selected record.



	Name	Sex	DOB	Sire	Dam	Registration	PreTitle	Coa
0	Subject							
1	ADIVEAN RAMANTHA LADY	F		MERRYCURY RAMADAN	MASCOT FORZA	GCCF NS 317583		
2	Sire							
3	MERRYCURY RAMADAN	M	10/08/1979	MAJOR BENJAMIN	FOXTWIST BONITA	GCCF NS 126195	Gc	
4	Dam							
5	MASCOT FORZA	F		DEEYIN FRIDAE	TASCONA PRINCESS SHEBA	GCCF NS 272398		
6	Full Siblings							
7								
8	Sire Siblings							
9	GINGERBREAD PRETTY PENNY	F	16/10/1986	MERRYCURY RAMADAN	ADUAM SWEET YASMIN	GCCF NS 315857	Ch	
10	SOUTHLEA SIMONE	F	31/03/1982	MERRYCURY RAMADAN	ELSILRAC REBEKAH	GCCF		
11	SOUTHLEA SUPERSCAMP	M	8/02/1981	MERRYCURY RAMADAN	KAPRICO KORNISHE	GCCF NS 173100		
12	TABBRA ONEINAMILLION		16/05/1989	MERRYCURY RAMADAN	TABBRA TUBAIG	GCCF CS 115424	Gc	
13	ADQWEAM BIOSSOM	F		MERRYCURY RAMADAN	SOOPURR ABIGAIL			
14	Dam Siblings							
15								
16	Generation 2							
17	TASCONA PRINCESS SHEBA	F		SLEEKINE CHOCOLATE DANDY	SILVER SAHARA	GCCF NS 150782		
18	MAJOR BENJAMIN	M	24/03/1976	ZYCLON LANCELOT	RAMONDA LILAC DANCER	GCCF NS 018617	Ch	
19	FOXTWIST BONITA	F	8/02/1978	MAYTIME LANDUCCI	FOXTWIST AURORA	GCCF NS 096079		
20	DEEYIN FRIDAE	M	3/07/1981	RAMONDA HONEY BEAR	MISHOYA MISHA	GCCF NS 018362		
21	Generation 3							
22	MISHOYA MISHA	F				GCCF		
23	RAMONDA HONEY BEAR	M				CGGF		
24	SILVER SAHARA	F				GCCF NSSR 026085		
25	ZYCLON LANCELOT	M	11/05/1974	QUINTRAL PIRATA	RAMONDA HIGHLIGHT	GCCF NS 1270	Ch	
26	RAMONDA LILAC DANCER	F	24/03/1975	BUMBLEBEE LILAC LAIRD	MEKHALA RAMONDA	GCCF NS 13985	Ch	
27	MAYTIME LANDUCCI	M	27/08/1975	KAPRICO ICEBERG	KIRASH TAMSIN	GCCF NS 13767	Ch	
28	FOXTWIST AURORA	F	5/05/1976	KIMOKI DAGMAR	FOXTWIST KITANIA	GCCF NS 18701	Ch	

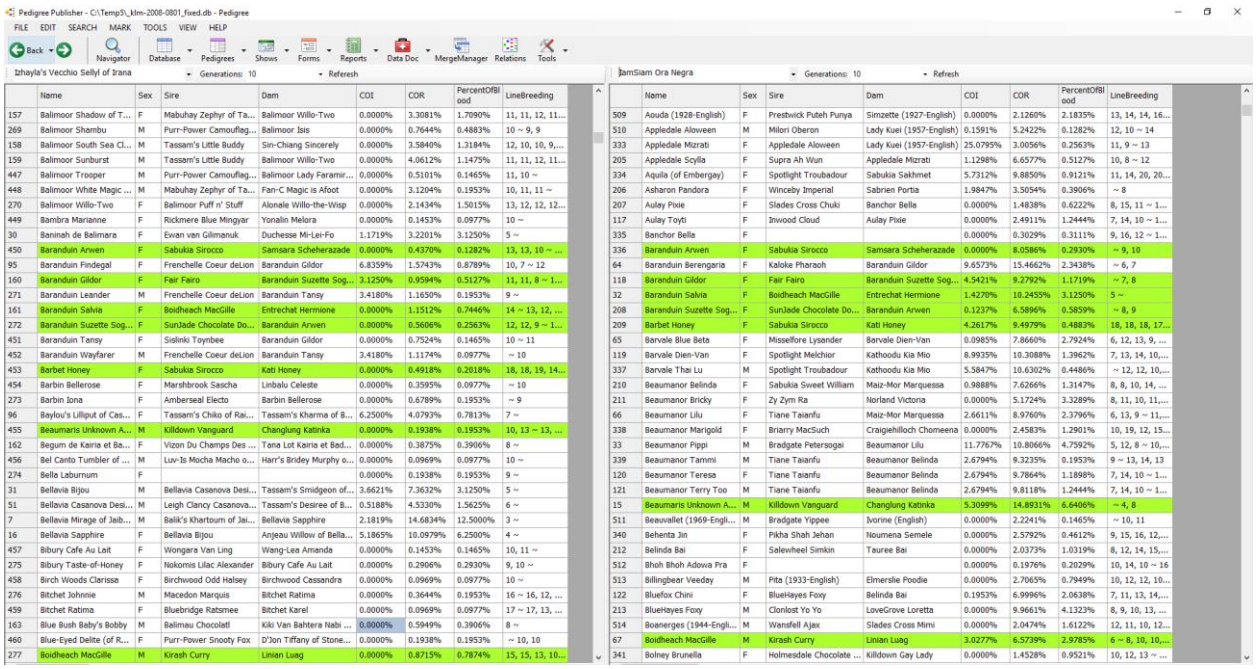
20 Breed Planner

This view can be accessed by clicking on the large Tools button. This view allows the user to independently select two different subjects, perform an independant inbreeding analysis of each and compare their respective ancestors to see how they are related.

The left and right halves have identical controls. The combobox is used to select a subject. Just type the name and a drop list of ALL names will appear scrolled to the first match. There is also a Generation control to set how many generations to perform the inbreeding analysis of each subject. Clicking the Refresh button will perform the calculation. For each ancestor listed, each view will show that ancestors sex, sire, dam, COI (inbreeding coefficient), COR (relationship coefficient), Percent of Blood and Line breeding. The ancestors are listed in alphabetic order but by right clicking on a column you can select to sort ascending descending or not sort on any column.

Common ancestors between the two are highlighted in green.

A partial screen shot of the view can be seen below:



21 Data Design

Currently it is not possible to change the name of a table or create new tables. Some changes to existing tables are possible using the TOOLS-Alter Table menu command.

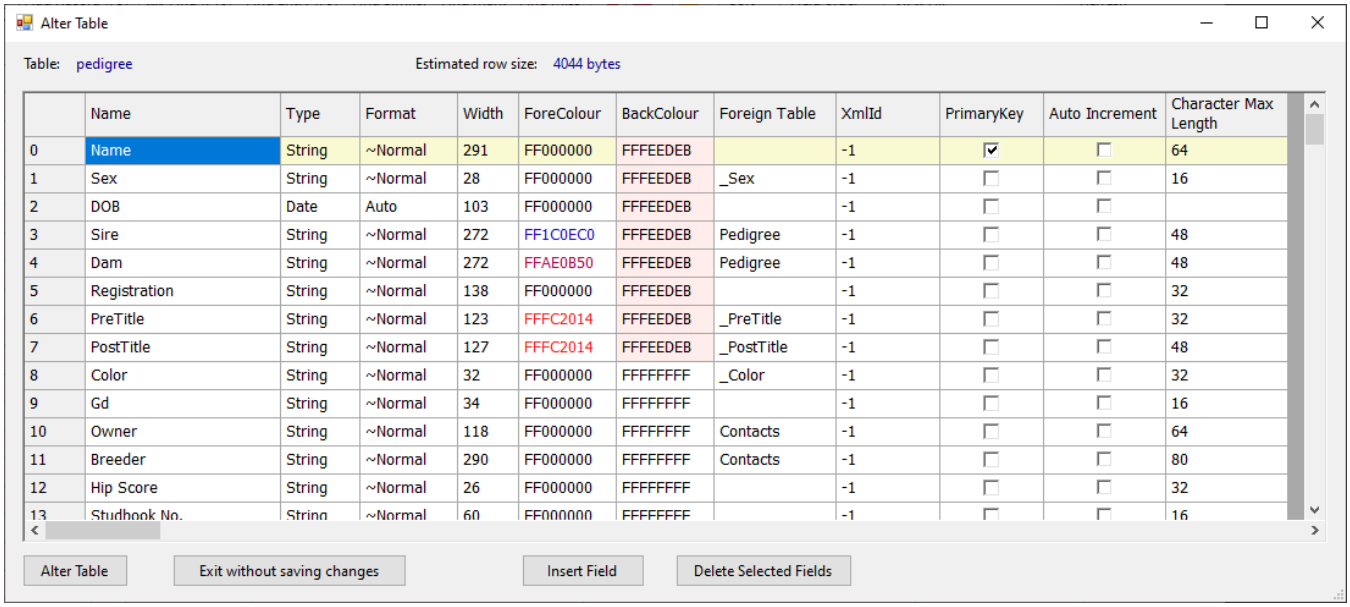
21.1 Create a New Table

The **TOOLS-Create Table** command will create a new table. First it brings up a dialog box. Enter the name of the table and start adding fields. If you want the table to be sorted then the first field must have the "Primary Key" field ticked.

The Pedigree and Contacts tables are examples of sorted tables while the Show, Litters and Medical tables are examples of unsorted tables.

Note that the "Character Max Length" column will only be shown when connected to MySQL. SQLite databases do not have an effective field or row length limit.

The Create Table dialog is very similar to the Alter Table dialog so refer to the next section for more detail.



	Name	Type	Format	Width	ForeColour	BackColour	Foreign Table	XmlId	PrimaryKey	Auto Increment	Character Max Length
0	Name	String	~Normal	291	FF000000	FFFEEDEB		-1	☑	☐	64
1	Sex	String	~Normal	28	FF000000	FFFEEDEB	_Sex	-1	☐	☐	16
2	DOB	Date	Auto	103	FF000000	FFFEEDEB		-1	☐	☐	
3	Sire	String	~Normal	272	FF1C0EC0	FFFEEDEB	Pedigree	-1	☐	☐	48
4	Dam	String	~Normal	272	FFAE0B50	FFFEEDEB	Pedigree	-1	☐	☐	48
5	Registration	String	~Normal	138	FF000000	FFFEEDEB		-1	☐	☐	32
6	PreTitle	String	~Normal	123	FFFC2014	FFFEEDEB	_PreTitle	-1	☐	☐	32
7	PostTitle	String	~Normal	127	FFFC2014	FFFEEDEB	_PostTitle	-1	☐	☐	48
8	Color	String	~Normal	32	FF000000	FFFFFFFF	_Color	-1	☐	☐	32
9	Gd	String	~Normal	34	FF000000	FFFFFFFF		-1	☐	☐	16
10	Owner	String	~Normal	118	FF000000	FFFFFFFF	Contacts	-1	☐	☐	64
11	Breeder	String	~Normal	290	FF000000	FFFFFFFF	Contacts	-1	☐	☐	80
12	Hip Score	String	~Normal	26	FF000000	FFFFFFFF		-1	☐	☐	32
13	Studbook No.	String	~Normal	60	FF000000	FFFFFFFF		-1	☐	☐	16

21.2 Alter Table

The following properties can be set on a field:

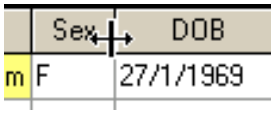
- Name – name of the field
- Type (String, Date, Number, Currency, Int, Long, Bool).
- Format is the display format. It is reasonably obvious for most data types, but for the Date type there are quite a few options such as "dd-MM-yyyy" but we recommend using "Auto" because then the format will be the same as used by your computer, e.g. in the US the format will then automatically be "MM-dd-yyyy".
- Width – this is the width of that field's column in the grid view. Note it has nothing to do with the number of allowed characters in a string field – which for SQLite is effectively unlimited and which for MySQL is set by the "Character max length".
- Forecolour – the colour of the text in that field
- Backcolour – the background colour of the field in the grid view.
- Foreign Table – this allows a field to be linked to the primary key of another table. For example the Sire and Dam fields are linked to the Pedigree table and the Owner field is linked to the Contacts table. Note

that it is not necessary to specify which field in the foreign table it is linked to because it must always be the primary key of that table. One use of the “Foreign Table” is so when editing and you click in say Owners you will get a list of Owners to select from.

- XmlId – this used for the OPSG XML import and export.
- Autoincrement – only applies to integer fields which are also a primary key.
- “Character max length” – applies only to MySQL and sets the maximum number of characters in a text field. It does not apply to date, integer, number, currency etc.

21.3 Change Field Width

The field width can be set using TOOLS-Alter Table but a more convenient way is in the grid view, move the cursor so that it is above the right hand boundary of the field - it will change to a double headed arrow as shown below - then press the mouse button and drag. Release the button when the desired width is set.



Note this can also be accomplished by entering the width in the Width column in Data Design view**.**

21.4 Change display order of fields.

Click on the “Field Order” button on the toolbar.

22 Pictures, Logos, Watermarks

Both pictures and logos can be inserted in any PedCloud form. The only picture file formats currently supported are PNG, GIF and JPEG files. These are widely used formats and are supported by nearly all graphics programs.

22.1 Watermarks

To set a watermark for your form first display the form then use TOOLS-Set Watermark. The location of the watermark file is stored in the form file so to keep your changes use FILE-Save Form File.

While the watermark file does not need to be in the same folder as the form file, it is recommended. The reason is that if they are in the same folder then the watermark file path is stored in the form file as a relative path. This means that as long as you keep form file together with any watermark files, you can move them anywhere or copy them to different computers and they will still work.

Here are some tips to preparing a watermark file in your favorite graphics program:

- you will need to prepare the watermark graphics file in a graphics editing program, e.g. PhotoShop;
- use a “soft edge” tool to remove the background from around your subject (usually a head shot or side view shot) ;
- make the picture very bright or “washed out” so that it doesn’t obscure the foreground (typically your pedigree)

22.2 Logos

To set a logo you must be in the Grid view. Then use VIEW-Set Forms Logo. This will set the same logo for ALL forms. The information is stored in your application preferences so will remain even if you change databases or form files or when you upgrade.

The logo can still be edited or replaced with a file by the same name or just use VIEW-Set Forms Logo to set a different image as your logo.

22.3 Pictures

Pictures are dynamic, i.e. they are dependent on the data. Many of the pedigree forms already include a photo field. To display a picture on those forms it is only necessary to store the picture (should be a JPG, PNG or GIF file) in the Photos subdirectory (of wherever your database file is located which is usually Public Documents\Breedmate) and then enter the name of the file in the Photo field of that record. You can also enter the file name by clicking in the Photo field of a record using the **right** mouse button – in which case a File Open dialog box will appear which you should use to navigate to where the file is kept and then select it and click on the Open button.

Some forms to do not include a picture – but you can easily add one. To add a picture, select the Field tool while in design view. Describe a rectangle as for the logo.

Note that the field which is so created is just the same as a normal field and will be displayed as text unless the field in the database is specially configured as a photo field. To do this go to the Data Design view and set the fields Field Type to Text and Display Type to Photo.

Pictures are just fields and as such they must be contained within a record (green rectangle) and the relevant field selected as for normal fields. After the picture’s rectangle has been drawn, its size and position can be adjusted as for logos, rectangles etc.

23 Forms

This section covers all types of forms including pedigrees

23.1 Typical Forms

All forms are listed under the Pedigree, Shows and Forms toolbar buttons.

The actual list of forms you have depends on which form file you have open. The main files are as follows:

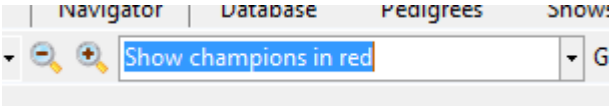
- UsDogForms2.fox – this for dogs for the US and uses US paper sizes like US Letter
- UsCatForms2.fox – this for cats for the US and uses US paper sizes like US Letter
- DogForms2.fox – this for dogs for the international market (non-US) and uses metric paper size like A4
- CatForms2.fox – this for cats for the international market (non-US) and uses metric paper size like A4

You can change which form file you use at any time by using the **FILE-Open** command then select one of these files from the "Public Documents\Breedmate" folder.

The PedCloud download page also has a link for a ZIP file containing database and form templates for goats, cattle and horses. The ZIP file can be unzipped anywhere but preferable in the "Public Documents\Breedmate" folder

23.2 Show Champions in Red

Select "Show champions in red" from the toolbar combobox. as shown in the screen shot below.



23.3 Selecting Fields to Display

The user can select what fields to display in different parts of the form, e.g. select what fields to show for the parents and grand-parents. This is explained in the section on Expressions.

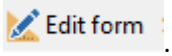
23.4 Form Doesn't Fit on Page

The most common reason for this is that a user has opened a non-US form file such as DOGFORMS2.FOX or CATFORMS2.FOX but they are printing on US Letter paper. This has the effect of cutting the bottom of the pedigree off. US users should be using either the USDOGFORMS2. FOX or USCATFORMS2.FOX file as appropriate.

A similar situation occurs when a user who has A4 paper uses the USDOGFORMS2.FOX or USCATFORMS2.FOX form file. In this case the right hand side of the pedigrees would appear cutoff.

If all else fails one option is to, when viewing the form click on the design button (green triangle) on the toolbar then select elements you want to move (or select everything with **EDIT-Select All**) then move them using the keyboard arrow keys. Each keystroke moves it 1mm in that direction. Use **FILE-Save Form** to keep your changes.

23.5 Centering a Form

First select the form from the Pedigree or other button. Then go into design mode by clicking the Edit Form button 

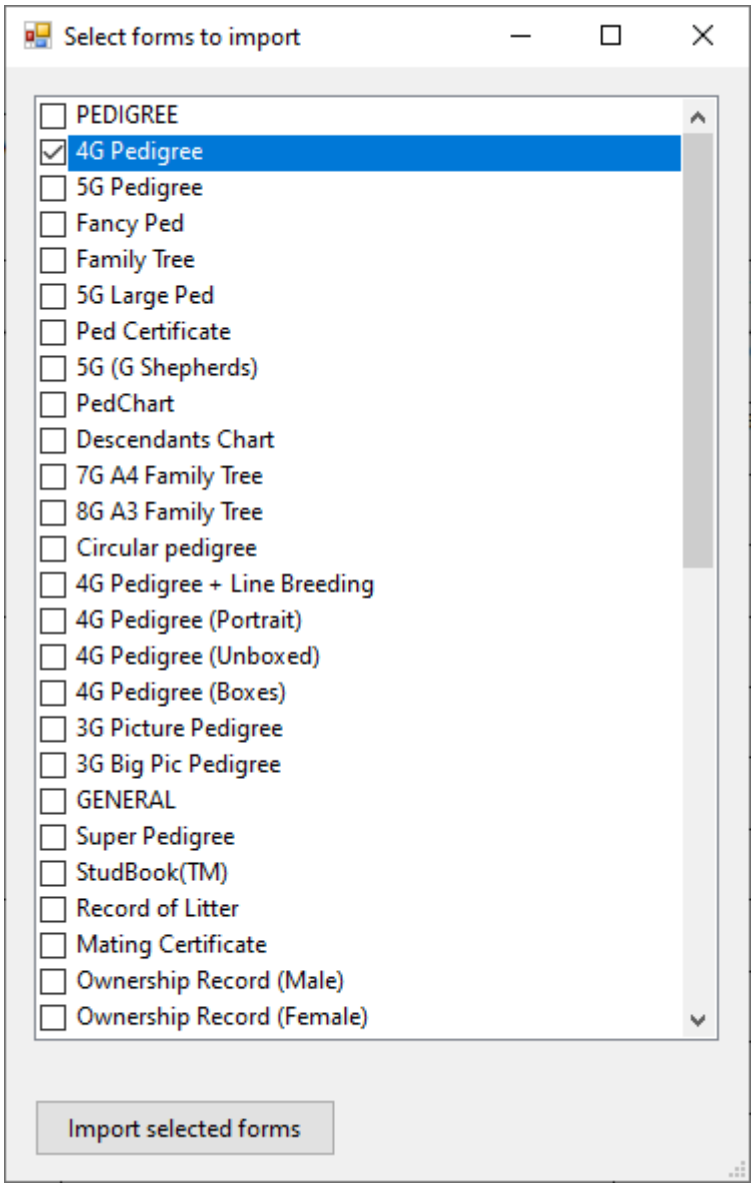
. Next select all objects in the form by using **EDIT-Select All**.

Now that all objects are selected they can be moved by using the keyboard arrow keys. Each keystroke will move everything in that direction by 1mm, or click on any selected object, drag the mouse then release the mouse button.

23.6 Copying or Duplicating Forms

In the Form view use TOOLS-Import Forms. You will be prompted to select the form file to import forms from. This form file can be any other form file or even the form file you already have open, in the case that you are copy a form from your current form file.

After selecting the file, a dialog appears as shown below:



Double click a checkbox next to the form you want to import or if you double click a CATEGORY (which are in all caps) then all the forms in the category are ticked. Next click on the “Import selected forms” button.

23.7 COI, COR

Some forms contain text that includes F=xx%, R=yy%. The F or COI refers to the Wrights Coefficient of Inbreeding and the COR is the Coefficient of Relationship which is a measure of the probability that this ancestor and the subject animal have the same genes by descent.
If a form does not display COI or COR you can easily add it by using **EDIT-Expressions** while viewing that form. The expression used in the different generations (parents, grand-parents) is set using that menu command. See the section on Expression below for more information.

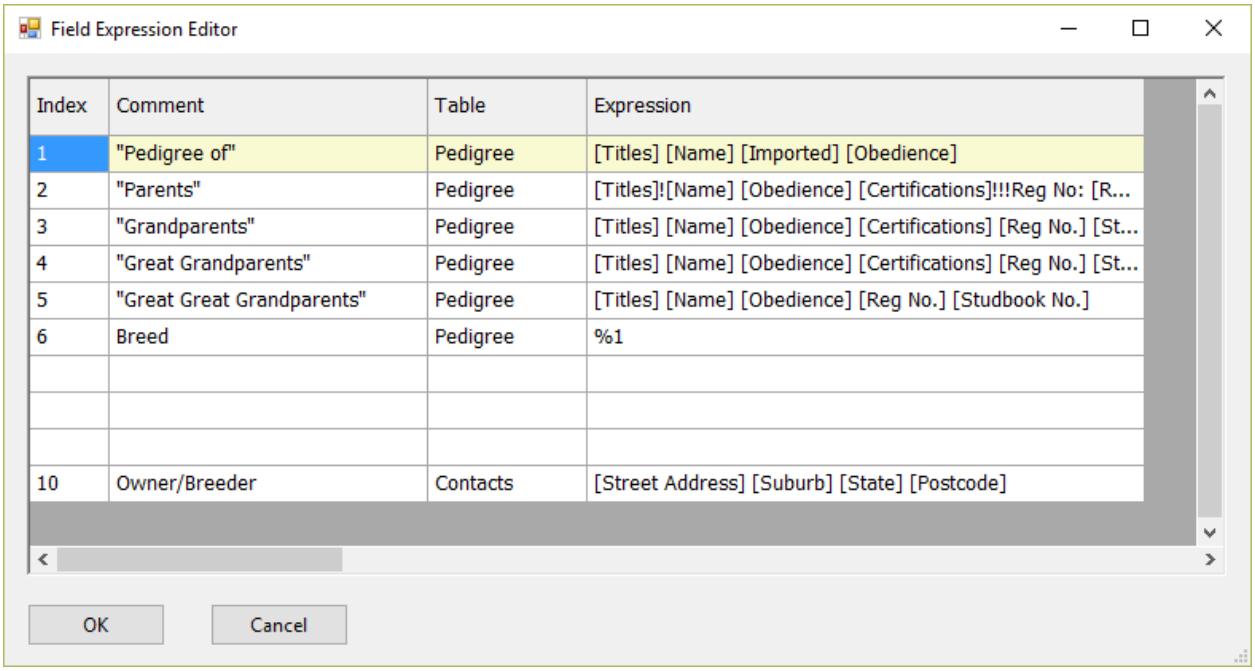
To see COI the expression needs [$COI] and to see COR use [$COR]. Note that if you wanted to see any real field like PreTitle you would use [PreTitle] but COI and COR are not real fields in the Pedigree table but are calculated fields. If any expression in a form has [$COI] or [$COR] then a 10 generation inbreeding calculation is performed.

24 Expressions

Expressions are used to specify what fields or other data you want to show in your forms. They basically can take the place of fields but they have the advantage that you can combine multiple fields with optional formatting and static text.

Most forms are designed so that users can easily select what fields are displayed in various sections of the form, e.g. pedigree forms allow the fields in each generation to be individually selected in any order and also include any fixed text.

To select what fields are displayed first make sure you are viewing the form, then use the **EDIT-Expressions** - a dialog box appears as shown below:



To change an existing expression click in the “Expression” cell in the row that corresponds to the part of the pedigree you wish to change, e.g. “Parents” or “Great GrandParents”. Note that the cell now has a “drop button”. Click on this bring up the expression editor which will help you create your expression. The expression editor is shown below:

Any characters you type in the edit box will appear as is in the form except for the following special characters which are available from the “Insert Special Character” list box:

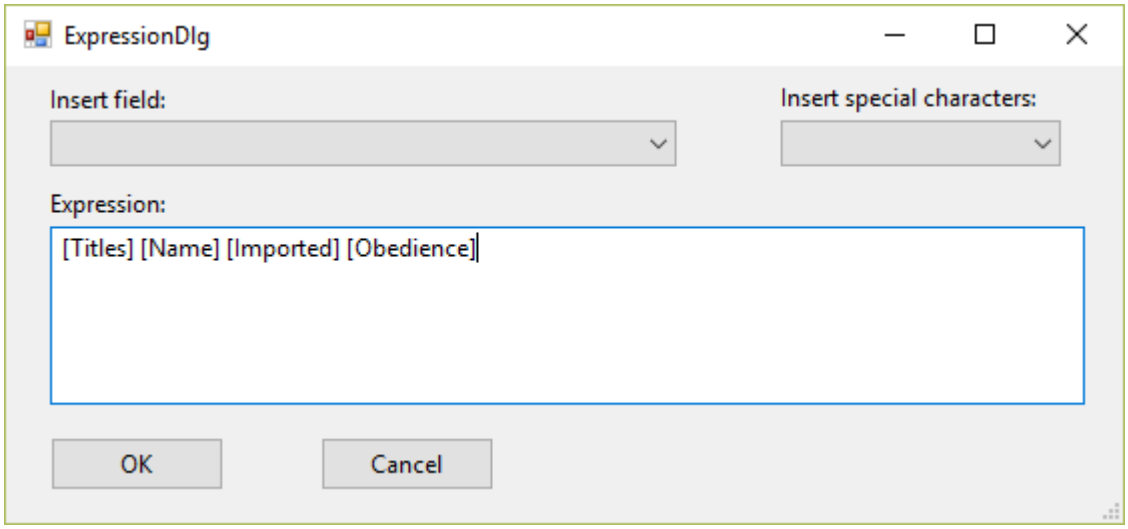
- New Line – inserts a ‘!’ which will be replaced by a new line.
- Breed – inserts ‘%1’ which will be replaced by the Breed
- Record Index – inserts %2 which will be replaced by the record’s unique number. This and the other indexes are only used when exporting to Pedigree Point or other web databases where the Sire and Dam names need to be replaced by the unique numbers for their corresponding records.
- Sire Index – inserts %3
- Dam Index – inserts %4
- Tab character – inserts %5.
- Inbreeding Coefficient – inserts [$COI]. Any form containing an expression with [$COI] or the other pedigree calculations fields will force an on-the-fly calculation of those values to 10 generations.
- Relationship Coefficient – inserts [$COR]

- Linebreeding – inserts [~Linebreeding]
- The '[' character followed by a field name and then a closing ']' means "replace this with the contents of this field". Hence if "[Name]" was in the expression then it would be replaced with the value from the Name field.
- The '{' and '}' enclose what is called a "text block". This is expanded on below.

A text block looks like one or more sequences of command=value, separated by semi-colons, e.g a valid text block is {v=DOB;f=yyyy;b=Date of birth}. The allowed commands are:

- "v" – this is the variable or name of a field, e.g. Name, Sex, Sire, Dam
- "f" – this is the format string, which are standard .NET format string as discussed further below.
- "b" – this the text to place BEFORE the field if the field evaluates to other than an empty string.
- "a" – this the text to place AFTER the field if the field evaluates to other than an empty string.

A fast way of putting in fields (i.e. those enclosed in '[' and ']') is to select the field from the field combo box. Every time you select a field it will appear in the expression.



The formatting for a field can also be specified by adding a colon after the field name then putting in the formatting string. For example if you have "Death Date" as a field and it is stored as a date then you can format that e.g. as MM-dd-yyyy by using [Death Date:MM-dd-yyyy].

The formatting strings are standard .NET format strings. See more at the following links:

https://docs.microsoft.com/en-us/dotnet/standard/base-types/standard-numeric-format-strings

https://docs.microsoft.com/en-us/dotnet/standard/base-types/custom-date-and-time-format-strings

The following are examples of date formatting.

MM/dd/yyyy	05/29/2015
dddd, dd MMMM yyyy	Friday, 29 May 2015
dddd, dd MMMM yyyy	Friday, 29 May 2015 05:50
dddd, dd MMMM yyyy	Friday, 29 May 2015 05:50 AM
dddd, dd MMMM yyyy	Friday, 29 May 2015 5:50

dddd, dd MMMM yyyy	Friday, 29 May 2015 5:50 AM
dddd, dd MMMM yyyy HH:mm:ss	Friday, 29 May 2015 05:50:06
MM/dd/yyyy HH:mm	05/29/2015 05:50
MM/dd/yyyy hh:mm tt	05/29/2015 05:50 AM
MM/dd/yyyy H:mm	05/29/2015 5:50
MM/dd/yyyy h:mm tt	05/29/2015 5:50 AM
MM/dd/yyyy HH:mm:ss	05/29/2015 05:50:06
MMMM dd	May 29
yyyy'-'MM'-'dd'T'HH':'mm':'ss.fffffffK	2015-05-16T05:50:06.7199222-04:00
ddd, dd MMM yyy HH':'mm':'ss 'GMT'	Fri, 16 May 2015 05:50:06 GMT
yyyy'-'MM'-'dd'T'HH':'mm':'ss	2015-05-16T05:50:06
HH:mm	05:50
hh:mm tt	05:50 AM
H:mm	5:50
h:mm tt	5:50 AM
HH:mm:ss	05:50:06
yyyy MMMM")	2015 May

25 Web Pedigrees

25.1 Static Pedigrees

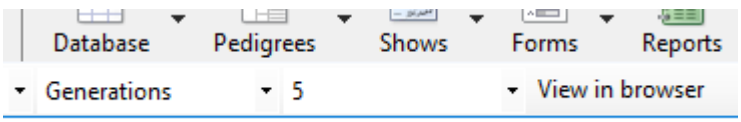
If you are only producing a small number of HTML pedigrees then static HTML pedigrees is the way to go. One example is shown below.

Pedigree of: Almondene Bärandalë Heather

Sex	F	**Reg No.**	1116725
Date of Birth	1994-06-05 12:00:00 AM	**Breed**	Border Collie
Owner	Barry Tanwell	**Breeder**	Barry Tanwell
Colour & Markings	Black & White	**Call Name**	Maddie
Comments	This is "Maddie". She has had a very succesfull show history.		

<table>
<tr><td rowspan="8">CH Almondene Digger 1264535
Blue</td><td rowspan="4">Aust & NZ GC Collydale Ringo 1256575
Lilac</td><td rowspan="2">Grand Champion Villawood Collingwood
Black Silver Ticked</td><td>Gr CH Villawood Whisky CDX UD TD
Brown</td><td>CH Burwood Lance CD 1173665
Chocolate</td></tr>
<tr><td>Kerrilee Chrissie 1124444
Blue</td></tr>
<tr><td rowspan="2">DGC Flockella Lassie AOC CDX 1043304
Lilac</td><td>Flockella Digger 982084
Lilac</td></tr>
<tr><td>Flockella Wee Dell 11621
Blue</td></tr>
<tr><td rowspan="2">Collydale Dell 1254366
peach</td><td rowspan="2">Flockella Speedy Bill 15451
Lilac Ticked Mist</td><td>Annelena Speed 128007
Brown</td></tr>
<tr><td>Flockella Wee Dell 11621
Blue</td></tr>
<tr><td rowspan="4">NZCH Almondene Celtic Beauty 1163625
Blue</td><td rowspan="2">CH Aurella Sanjay Sarson 1105715
Brown</td><td rowspan="2">Ennisdale Sue 13722
Blue</td><td>Lederhosen Swift PDX
Black Spotted Tabby</td></tr>
<tr><td>Borcol Meg 1201035
Brown</td></tr>
<tr><td rowspan="2">CH Almondene Charger N1264555
Brown</td><td>CH Almondene Illinois Jake CDX 1177435
Brown</td></tr>
<tr><td>Biddy Bereft Q93635/99A
Blue</td></tr>
<tr><td rowspan="2">Odensholm Coquette 15V74/2
Gold</td><td rowspan="2">CH Almondene O'Barandale Lassie 1116675
Brown</td><td>CH Almondene Illinois Jake CDX 1177435
Brown</td></tr>
<tr><td>Almondene Meg Cn 1201024
Blue</td></tr>
<tr><td rowspan="2">CH Randwick Thunder 23V70
Lilac</td><td>Kooanduon Aranui 33V64
Blue</td></tr>
<tr><td>CH Bingara Lass Q94496/99B5
Chocolate</td></tr>
<tr><td rowspan="2">Odensholm Gillian Gypsy 5V73
Blue</td><td>CH Odensholm Loch Laddie CD 18V68
brown</td></tr>
<tr><td>Odensholm Barandale Lass CD 14V70
Blue</td></tr>
<tr><td></td><td></td><td></td><td>Kerrilee Toss 1204186</td><td>Stan of Berwickshire
Chocolate</td></tr>
</table>

PedCloud comes standard with “4-10G generation HTML pedigree” located under the Reports button. The actual number of generations is selected from the toolbar. The toolbar combo also allows setting the forecolor, back color and font size as shown below:



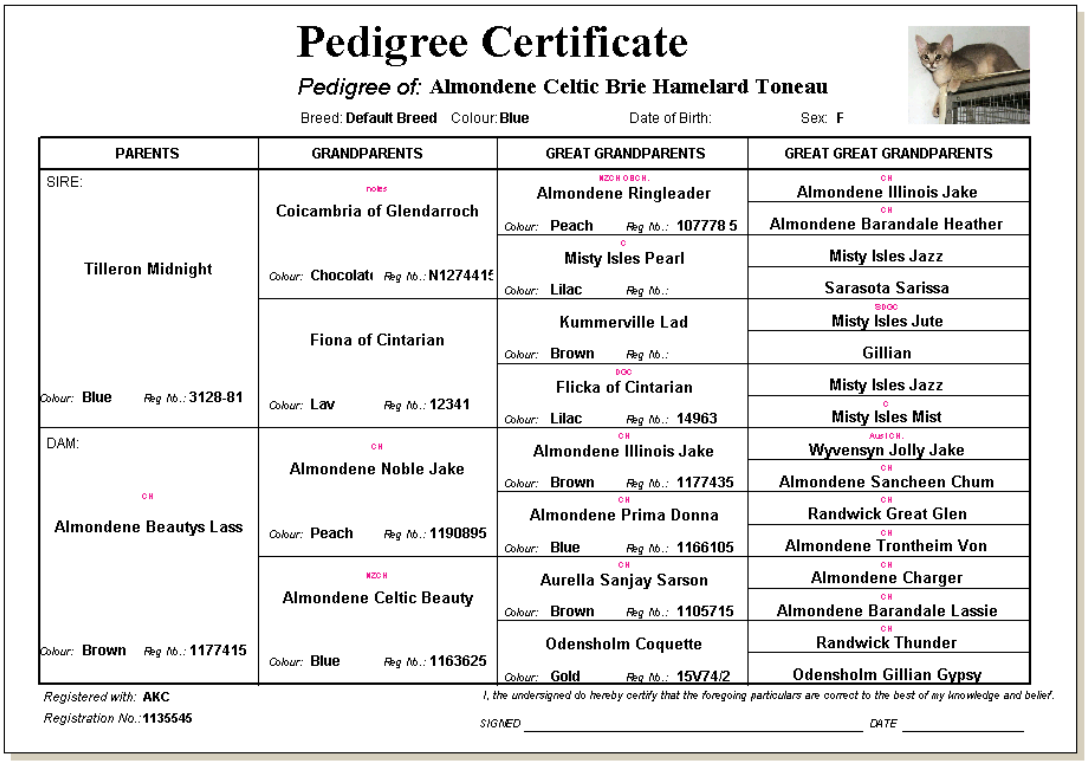
To create pedigrees like this just follow these steps:

- Open PedCloud and select the entry whose pedigree you wish to produce.
- Click on the Report button and select "4-10G HTML Pedigree" from the list.

- Select "View in browser". This will save the HTML to a file called "temp.html" located in this folder: "C:\Users\Public\Documents\Breedmate".
- If you want to email it just Ctrl-A then Ctrl-C in your browser, then paste into your email. Make sure the email is in HTML format.
- You can now upload this file to your web site and create links to it on other web sites
- If the subject record has a photo, then its relative path name will appear in the Photo field, e.g. "Fred.png". The actual file will be in a sub-folder "Photos" of where your database file (*.db) is stored. If you also want the photo to appear on your web site make sure to not only copy the "temp.html" file but also copy the relevant photo file to a sub-folder on your web server called Photos.
- You can of course directly edit the report template for the HTML report. This allows you to change virtually every aspect of this report. In the <style> section it's easy to change fonts and colors. If you are unfamiliar with HTML formats then google CSS.

25.2 Picture Pedigrees

Picture web pedigrees are simply images in PNG (pronounced "ping") file format. This is similar to GIF and is supported by most browsers. An example of a picture pedigree is shown below.



Pedigree Certificate

Pedigree of: **Almondene Celtic Brie Hamelard Toneau**

Breed: **Default Breed** Colour: **Blue** Date of Birth: Sex: **F**

PARENTS	GRANDPARENTS	GREAT GRANDPARENTS	GREAT GREAT GRANDPARENTS
SIRE:		NZCH OSCH. Almondene Ringleader	CH Almondene Illinois Jake
	notes Coicambria of Glendarroch	Colour: Peach Reg No.: 107778 5	CH Almondene Barandale Heather
Tilleron Midnight		C Misty Isles Pearl	Misty Isles Jazz
	Colour: Chocolate Reg No.: N127441	Colour: Lilac Reg No.:	Sarasota Sarissa
	Fiona of Cintarian	Kummerville Lad	SBOC Misty Isles Jute
		Colour: Brown Reg No.:	Gillian
Colour: Blue Reg No.: 3128-81		DOC Flicka of Cintarian	Misty Isles Jazz
	Colour: Lav Reg No.: 12341	Colour: Lilac Reg No.: 14963	C Misty Isles Mist
DAM:		CH Almondene Illinois Jake	Aust CH. Wyvensyn Jolly Jake
	CH Almondene Noble Jake	Colour: Brown Reg No.: 1177435	CH Almondene Sancheen Chum
CH Almondene Beautys Lass		CH Almondene Prima Donna	CH Randwick Great Glen
	Colour: Peach Reg No.: 1190895	Colour: Blue Reg No.: 1166105	CH Almondene Trontheim Von
	NZCH Almondene Celtic Beauty	CH Aurella Sanjay Sarson	CH Almondene Charger
		Colour: Brown Reg No.: 1105715	CH Almondene Barandale Lassie
Colour: Brown Reg No.: 1177415		Odensholm Coquette	CH Randwick Thunder
	Colour: Blue Reg No.: 1163625	Colour: Gold Reg No.: 15V74/2	Odensholm Gillian Gypsy

Registered with: **AKC**

Registration No.: **1135545**

I, the undersigned do hereby certify that the foregoing particulars are correct to the best of my knowledge and belief.

SIGNED _____ *DATE* _____

They can be easily created in PedCloud as follows:

- Start PedCloud and select the entry whose pedigree you wish to generate
- Select the pedigree form from the Pedigree button
- Select **EDIT-Copy as image**
- In your web page editor use **EDIT-Paste** (Ctrl+V).
- You can also make any of the ancestors in the pedigree hyperlink to another pedigree image or web page by first selecting the pedigree image then using the "Rectangular Hotspot" tool from the Pictures toolbar (use VIEW-Toolbars-Pictures to enable this toolbar). Next describe a rectangular area over that

ancestor's box in the pedigree and then set the hyperlink to the web page containing that ancestor's pedigree. Note that if the ancestor's pedigree image is contained on the same web page then you will need to set a bookmark at that image before doing the hotspot.

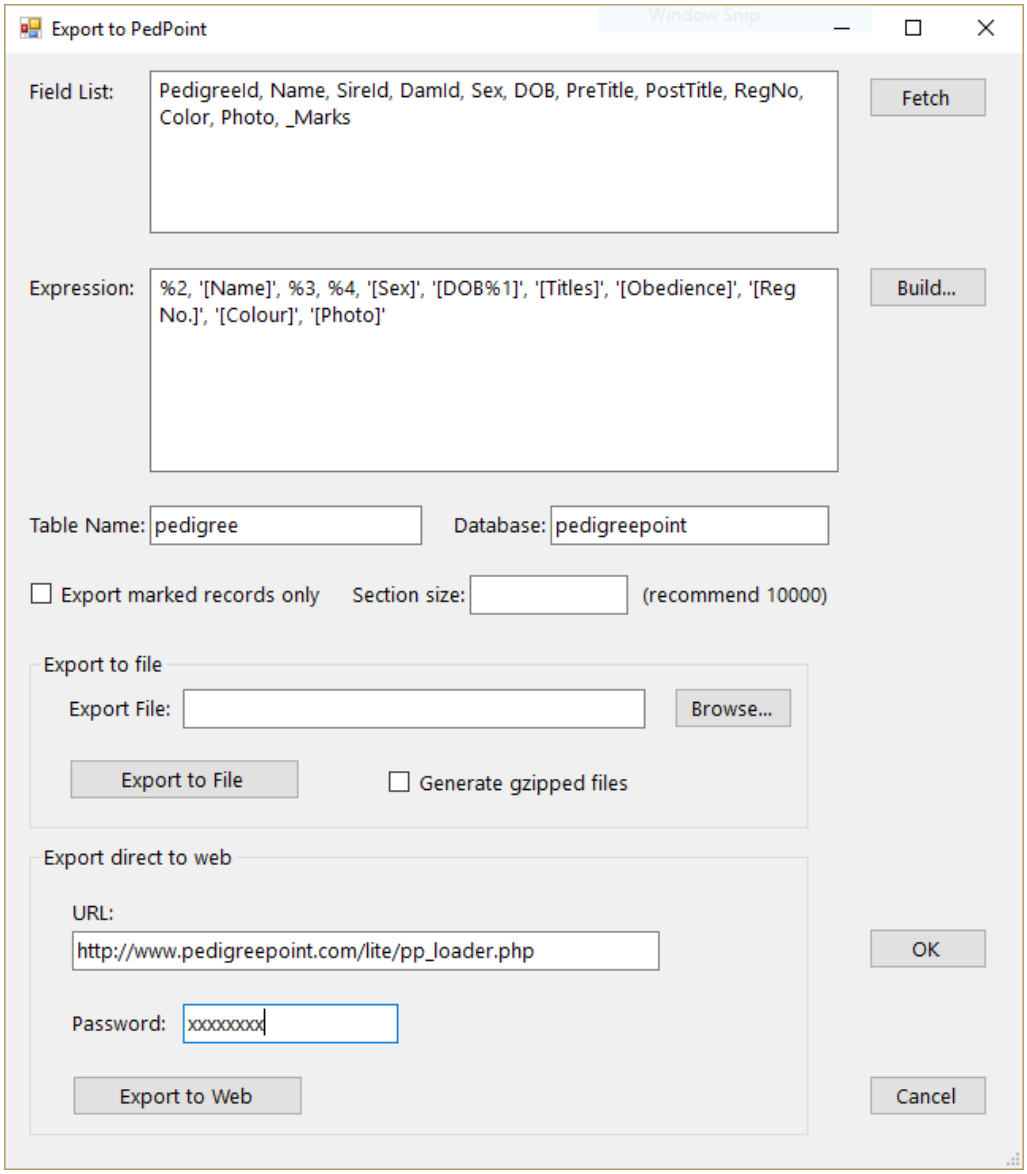
25.3 Pedigree Point

This software runs on a web site and stores data in a MySQL database. Users of the web site can enter a partial search string and get a matching list of names. Clicking on a name will then display the pedigree.

For more information on PedPoint please go to the web site www.pedigreepoint.com . Note PedPoint is an open source product that is free for non-commercial use. It is provided by us as a service to the general community. You can obtain a copy of the PedPoint installation package from us by emailing support@breedmate.com.

Exporting for PedPoint can be done either by producing text files for manual upload and execution using phpMyAdmin or you can directly export to the web site.

To begin the export process click on **TOOLS-Export PedigreePoint**. The following dialog appears:



The fields which must be filled in for both types of export are:

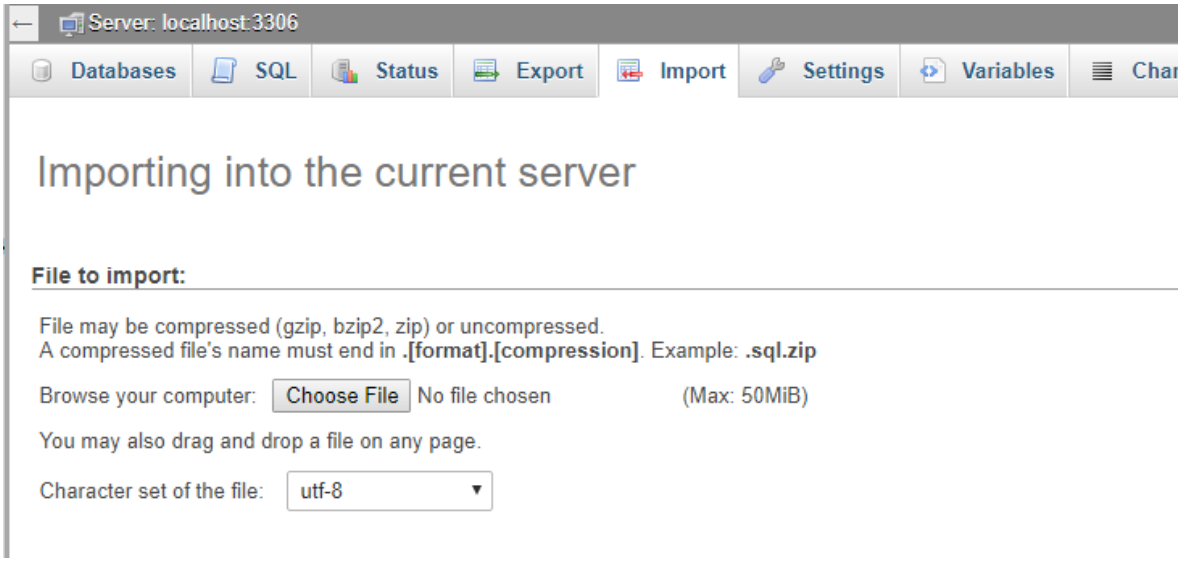
- **Field List** - Field List" textbox to allow setting the list of fields which will be exported. These must be actual field names in the MySQL database. This is useful if you do not which to write to all fields, e.g. in the "account" table some of the fields are set by the PedigreePoint software such as LastLogon.

- **Fetch** –this button will retrieve the “Field List” actually on the PedPoint server. This can also be useful when trying to understand why an export is failing. It will also retrieve the “Database” name. This is only required when using “Export to File”.
- **Expression** – this is like any other export string in that normal text is sent as is and any text in square brackets is replaced by the contents of the field with that name. E.g. [Sire]. Also fields beginning with %$ have special meaning. The normal export string is “%2, '[Name]', %3, %4, '[Sex]', '[DOB%1]', '[Titles]', '[Obedience]', '[Reg No.]', '[Color]', '[Photo]'”. The Build button will assist in creating this string. For more information on expression go to ***Section 23 Expressions***.
- **Table Name** – this is the name of your table in the MySQL database. It is normally pedigree unless you have multiple breed “databases” (actually each is a table).
- **Section size** – actually only ever used for file exports. This is the number of records per file. It should not be too large otherwise the file upload may time out. It shouldn’t be too small either otherwise there will be too many files to upload.
- **Export File** – the name of the export file. Typically, several files will be generated. If there are 30,000 records in your database and the section size has been set to 10,000 then you would have three export files. The name of each file is the same except for a sequence number in parentheses. If you selected the file name “C:\Temp\Fred.txt” then you would get three files, i.e. “C:\Temp\Fred (1).txt”, “C:\Temp\Fred (2).txt”, “C:\Temp\Fred (3).txt”. Note that if the “Generate Gzip’ed file” option is selected then the file name will be forced to have a .GZ extension. The Browse button can be used to help create the file path by allowing selecting of a folder.
- **Export to File** button – should only be pressed if exporting to a file.
- **URL** – this is the URL for your web site with cgi-bin/pp_loader.pl tacked on the end. Hence if your web site www.mypoodles.com then the URL should be http://www.mypoodles.com/pp_loader.aspx.
- **Password** – only used for direct web site exports. This password is set by you in your pp_config.pl file which you would have modified and uploaded to your web site when you first set it up.
- **Export To Web** button – only pressed when doing a direct web export.

To export to the web, click the Fetch button first then manually check that there is a one to one correspondence between the fields in the “Field List” and the “Expression”. If a field is of type string then in the Expression it must be in single quotes.

If you do not want to export all fields then just remove them from both the Expression and the Field List. Also make sure that in the table schema a default value has been set for any field you are not exporting.

Sometimes there are issues when using export to web or may simply prefer to **export the file**. In that case you will need to login to your control panel, then select phpMyAdmin, click on the Import tab as shown below. Next click on the “Choose File” button and select the file generated by the PedPoint export.

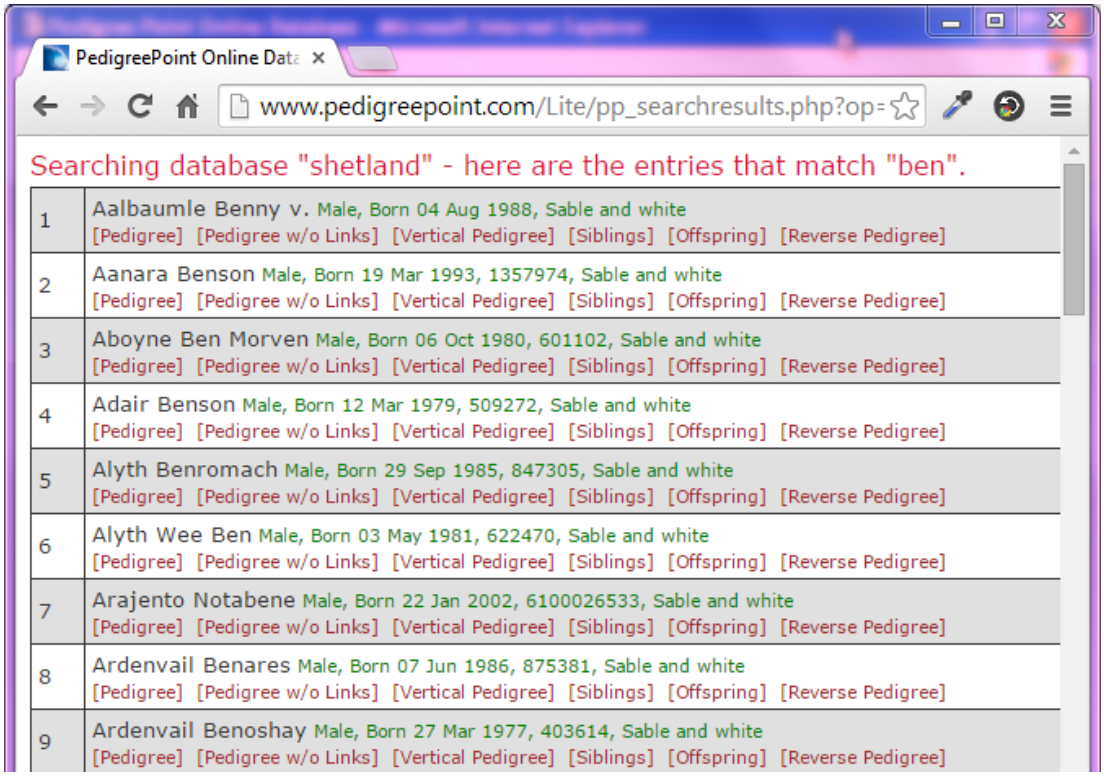


After exporting data to PedigreePoint you can try the search page. A typical search page in PedPoint is shown below. Note that you can search a number of separate fields – not just the name field. There is also an option to select how many generations to display in the pedigree.

Follow these steps to search for an entry in the database

Number of generations:	Select the number of generations you will want displayed in the pedigree. For most computer printers printing in Landscape mode, 5 generations is the best choice. 5
Field to search:	Name
Search string:	Enter the name, or partial name, to search for. For example, entering "ben" will find all entries whose names contain "ben". Use * as a wild card to match any characters. ben Anywhere in field
Gender:	Ignore
Titles:	Ignore
Born in the last N years:	Ignore
Has parents:	Ignore
Order by:	Name
Database:	Select which database to use: Cavalier
	Click on the "Search Now" button below. Search Now

A typical search **results** page is shown below:


PedigreePoint Online Data
www.pedigreepoint.com/Lite/pp_searchresults.php?op=
Searching database "shetland" - here are the entries that match "ben".
1 Aalbaumle Benny v. Male, Born 04 Aug 1988, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
2 Aanara Benson Male, Born 19 Mar 1993, 1357974, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
3 Aboyne Ben Morven Male, Born 06 Oct 1980, 601102, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
4 Adair Benson Male, Born 12 Mar 1979, 509272, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
5 Alyth Benromach Male, Born 29 Sep 1985, 847305, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
6 Alyth Wee Ben Male, Born 03 May 1981, 622470, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
7 Arajento Notabene Male, Born 22 Jan 2002, 6100026533, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
8 Ardenvail Benares Male, Born 07 Jun 1986, 875381, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]
9 Ardenvail Benoshay Male, Born 27 Mar 1977, 403614, Sable and white
[Pedigree] [Pedigree w/o Links] [Vertical Pedigree] [Siblings] [Offspring] [Reverse Pedigree]

26 Views

26.1 Change the size of the PedCloud window

Move the cursor so that it is above the edge of the window - the cursor will change shape to a double headed arrow - when it does, click and drag the mouse to get the desired size. Double clicking the title bar will maximise / minimise the window.

26.2 Change the position of the PedCloud window

Click in the title bar and drag window to its desired position.

26.3 Move around the grid view

Use the horizontal or vertical scroll bars or use the keyboard commands, Page Up, Page Down, Home, End, left and right arrow, up and down arrow.

26.4 Trial matings

The pedigree for a proposed mating can be viewed by creating a dummy record for the mating then displaying its pedigree as you do for any other record.

The dummy record can be called anything but if you start the name with a "#" then it will appear at the beginning of the table, e.g. "#Mating – Lucy and Geordie". Using this method you can also calculate the inbreeding coefficient of the proposed mating by selecting the dummy record and using **EDIT-Calculate Inbreeding**.

26.5 View Show Results

To view all show results, go to the database view and from the Table menu select Show. To view show results for a specific entry, click on a cell in the name field of the Show Table containing the entries name then select **MARK-Substring**, then select **VIEW-Marked Only**.

27 Printing

27.1 Printing from the Database View

The database view is great for listing information on a large number of entries. To print out your entire database simply select **FILE-Print**. More fields can be printed across the page by selecting the landscape printing mode using **FILE-Print Setup**. You can restrict what fields are displayed using the Field Chooser to hide fields or change their order. The records which are displayed can be selected by filtering or sorting.

27.2 Selecting the Print Area

The print area is selected literally be selecting an area on the grid. This is done this done by clicking on the top left cell of the area, then going down to the bottom right, hold down the shift key and click on that cell.

When then the Print dialog comes up it detects that you have an area selected and sets the "Print Range" option to "Selection".

27.3 Printing Forms

Printing forms is as simple as selecting **FILE-Print**. Note every form has its own particular paper size and PedCloud will automatically setup the printer for that paper size.

27.4 Print a list of all dogs belonging to a particular kennel

Select any cell in the name field, type the kennel prefix in the edit box and select **Substring** from the Mark menu. Next select the Filter Marks toolbar. This will Cause only those records which are marked to be displayed on screen and also when printing. The final step is to print using the **FILE-Print** command.

27.5 Print out all offspring of a selected entry -

Select all offspring up to 1st or 2nd or 3rd or 4th or All generations. Then select **FILE-Print** .

27.6 Print all ancestors of a selected entry

Select the entry then select **Ancestors** from the Mark menu. Next select the Filter Marks toolbar button and then print.

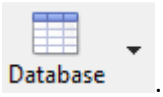
27.7 Print all dogs with a selected genetic disease

Select a cell in the GD field, enter the disease name in the edit box and select **Substring** from the Mark menu. Next select the Filter Marks toolbar button and then print.

27.8 Print an A3 form on A4 paper.

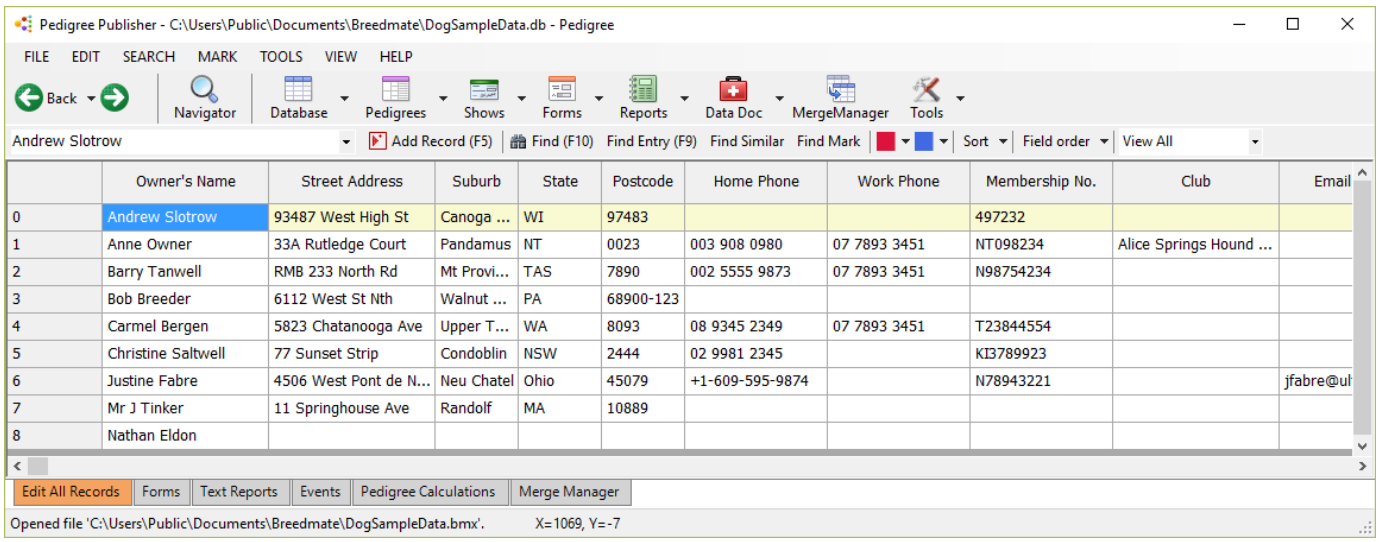
From the design view select **FILE-Print Setup** and select Fit To Page and set the Paper Size to A4 then click OK. Next select File Print.

28 Contacts Table

The **Contacts** table stores details on owners, breeders, judges, agents and handlers. To get to that table, click on the drop down Database toolbar button 

. Right-click on the Owner or Breeder fields in the Pedigree Table to look up names for insertion in the Navigate Tool.

Figure 20.1



	Owner's Name	Street Address	Suburb	State	Postcode	Home Phone	Work Phone	Membership No.	Club	Email
0	Andrew Slotrow	93487 West High St	Canoga ...	WI	97483			497232		
1	Anne Owner	33A Rutledge Court	Pandamus	NT	0023	003 908 0980	07 7893 3451	NT098234	Alice Springs Hound ...	
2	Barry Tanwell	RMB 233 North Rd	Mt Provi...	TAS	7890	002 5555 9873	07 7893 3451	N98754234		
3	Bob Breeder	6112 West St Nth	Walnut ...	PA	68900-123					
4	Carmel Bergen	5823 Chatanooga Ave	Upper T...	WA	8093	08 9345 2349	07 7893 3451	T23844554		
5	Christine Saltwell	77 Sunset Strip	Condoblin	NSW	2444	02 9981 2345		KI3789923		
6	Justine Fabre	4506 West Pont de N...	Neu Chatel	Ohio	45079	+1-609-595-9874		N78943221		jfabre@ul
7	Mr J Tinker	11 Springhouse Ave	Randolf	MA	10889					
8	Nathan Eldon									

Records are added to this database by the addition of matching Owner and Breeder entries from the Pedigree Database. New entries can be added directly by the user. Click on **Database** and choose **Contacts** to open the Contacts Table, Figure 20.1. Press F5 or click on **Add Record** to add a new record from a name typed into the edit box. Complete the Street Address and other fields. The Contacts table is keyed and is sorted by owner/breeder name. As the name of the database implies, it can be used as a general contacts database, not just a list of owners and breeders appearing in the Pedigree Database.

Note that the names appearing in the Names column must exactly match the names entered in the Owners or Breeders fields in the Pedigree table if the owners or breeders details are to appear in forms such as show entries. If you change the name in either the Pedigree or Contacts table then you must also change it in all other tables that reference that name.

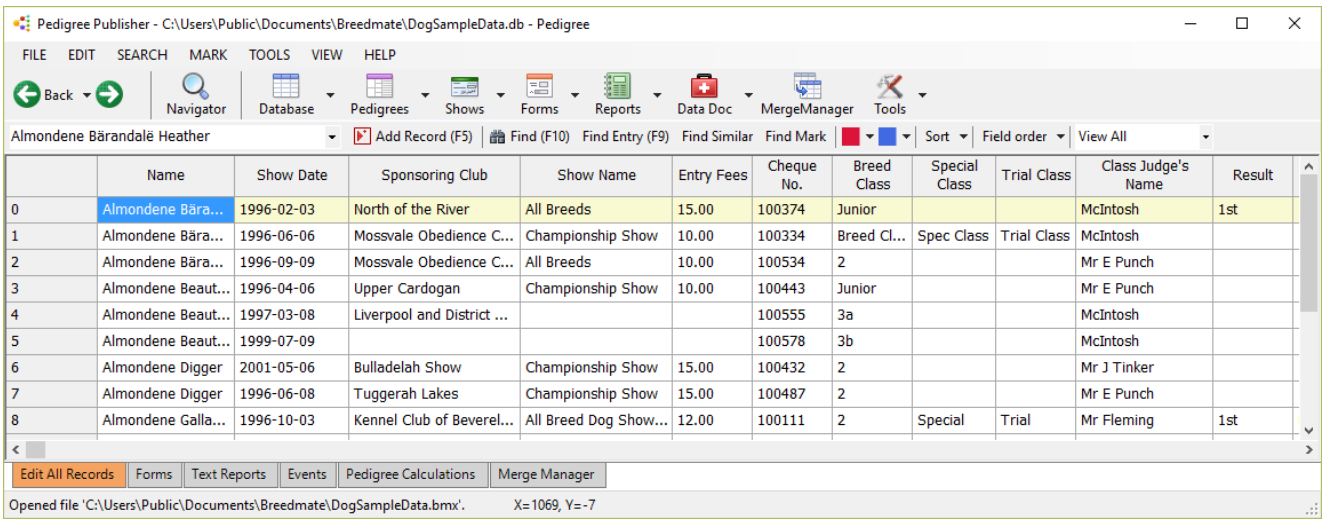
29 Show Entries / Results

29.1 Show Entries

Show entries can be produced by following these steps:

- First create a record for the show entry in the Show table. One way of doing this is to go to the Show table, click on the **Add Record** button, click in the empty name cell with the right mouse button to bring up the Navigator then select the entry and **Insert**. Alternatively if you have already done a show entry which is very similar to the one you are about to do, just select it in the Show table and use *the* **Copy Record** command (F6 key). See Figure 21.1 which shows a database view of the Show Table.
- After filling in all the details of the show entry (including date, club, name, breed class), click on the record and select the **Shows** button and the show entry form you want from the popup menu.
- Next feed in a standard preprinted show entry into your printer and select **FILE-Print**.
- It is possible that when printed the show details will not align with the preprinted entry form. Use the design view to move the fields around. First click on Design button then do **EDIT-Select All**, then use the cursor keys to move all the selected items. Each press of the cursor keys will move the text 1mm in the relevant direction. Its also possible you may need to change the paper orientation from landscape to portrait. This is done again in design view by clicking on the **FILE-Print Setup**. Remember to **FILE-Save Form File** to keep these changes.
- Make sure that an entry in the Contacts table exists for the owner of the entry otherwise the owners address, phone number and membership number will not appear. To create an entry, first select a cell containing the owner's name, then in the database view select the Table menu and the Contacts table. Then hit the F5 key to create a record with the owner's name (it should be in the Edit box because you previously selected it). Next enter the other details such as address, suburb, phone number.

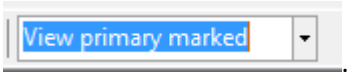
Figure 21.1 - Show Entries



	Name	Show Date	Sponsoring Club	Show Name	Entry Fees	Cheque No.	Breed Class	Special Class	Trial Class	Class Judge's Name	Result
0	Almondene Bära...	1996-02-03	North of the River	All Breeds	15.00	100374	Junior			McIntosh	1st
1	Almondene Bära...	1996-06-06	Mossvale Obedience C...	Championship Show	10.00	100334	Breed Cl...	Spec Class	Trial Class	McIntosh	
2	Almondene Bära...	1996-09-09	Mossvale Obedience C...	All Breeds	10.00	100534	2			Mr E Punch	
3	Almondene Beaut...	1996-04-06	Upper Cardogan	Championship Show	10.00	100443	Junior			Mr E Punch	
4	Almondene Beaut...	1997-03-08	Liverpool and District ...			100555	3a			McIntosh	
5	Almondene Beaut...	1999-07-09				100578	3b			McIntosh	
6	Almondene Digger	2001-05-06	Bulladelah Show	Championship Show	15.00	100432	2			Mr J Tinker	
7	Almondene Digger	1996-06-08	Tuggerah Lakes	Championship Show	15.00	100487	2			Mr E Punch	
8	Almondene Galla...	1996-10-03	Kennel Club of Beverel...	All Breed Dog Show...	12.00	100111	2	Special	Trial	Mr Fleming	1st

29.2 Show Results

Show results are also stored in the Show table and will use the same records as the show entry. In other words you would first create a show record for the show entry, then fill in the show results in the same record.

To view the show results for one particular entry, click on a name cell with the entries name and select **MARK-Substring** then use select "View primary marked" from the toolbar - 

.

To view results for one particular judge, select the judge's name by clicking on a cell containing the judges name - it will then appear in the edit box (alternately you can just type the name into the edit box). Then repeat as before.

30 Medical / Heats / Mates / Litters

30.1 Medical Records

The Medical table can be accessed by clicking on the Database drop down button and selecting Medical from the menu. This table contains the medical records for all of your dogs (for whichever breed this file is for). Note that vaccination records should be kept in the Vaccination table.

30.2 Heats / Mates Records

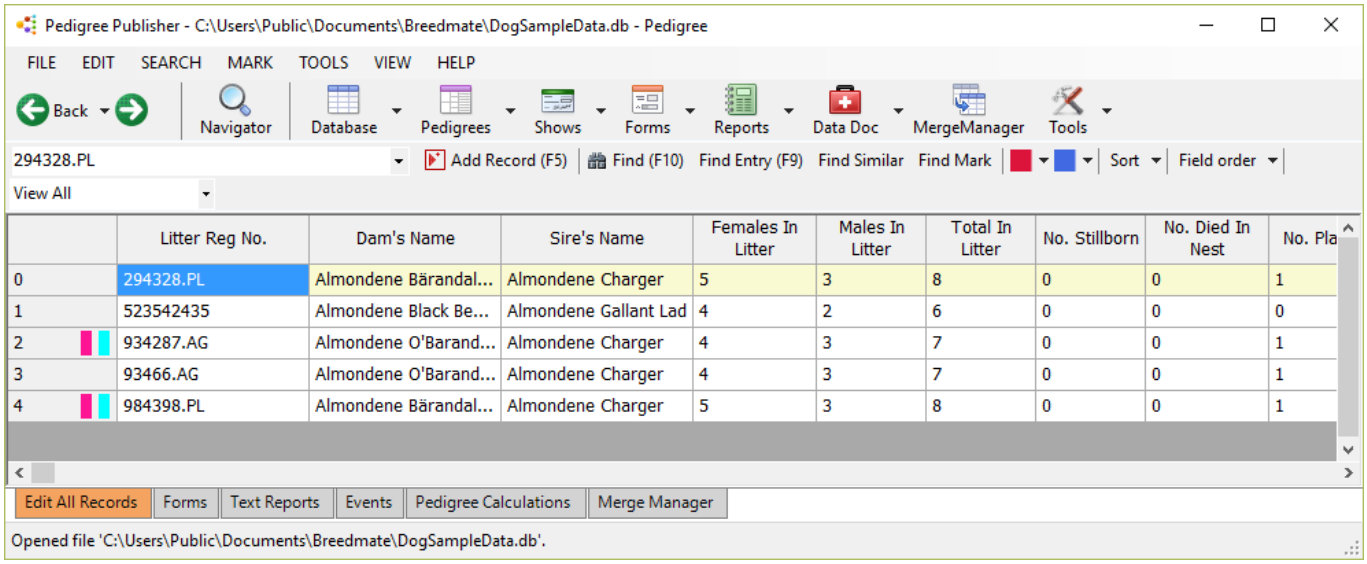
The Heats / Mates table stores details on the heats and possibly matings of all your animals. The Heats / Mates table can be accessed by clicking on the Database drop down button and selecting Heats / Mates from the menu.

To see the Heats / Mates records for a particular dog, from the Heats / Mates table click on the dog's name and then select **MARK-Substring**, then use select "View primary marked" from the toolbar.

If you would like to store additional information, it is a simple matter to add more fields and resize these fields.

30.3 Entering Litters

First you need to add one record to the Litters table as shown below.

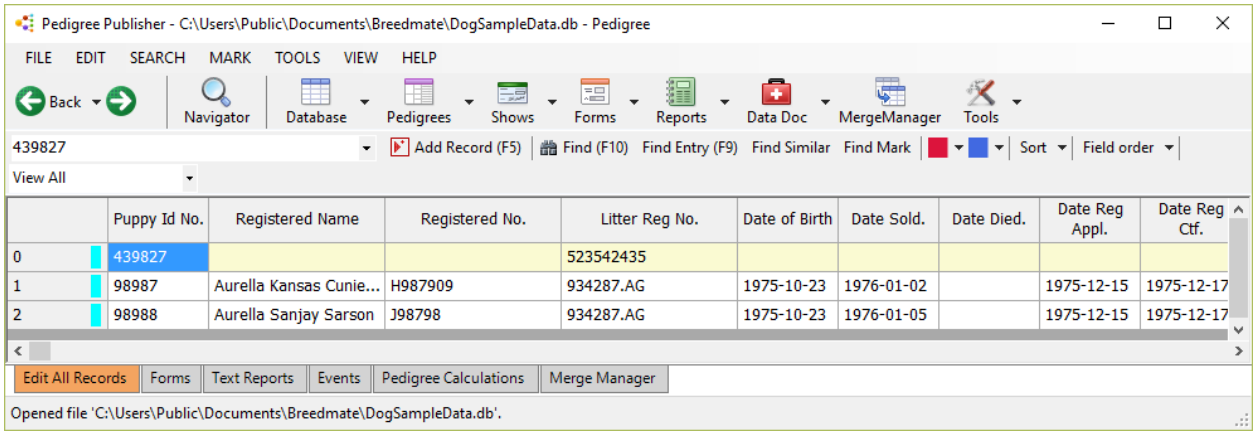


	Litter Reg No.	Dam's Name	Sire's Name	Females In Litter	Males In Litter	Total In Litter	No. Stillborn	No. Died In Nest	No. Pla
0	294328.PL	Almondene Bärandal...	Almondene Charger	5	3	8	0	0	1
1	523542435	Almondene Black Be...	Almondene Gallant Lad	4	2	6	0	0	0
2	934287.AG	Almondene O'Barand...	Almondene Charger	4	3	7	0	0	1
3	93466.AG	Almondene O'Barand...	Almondene Charger	4	3	7	0	0	1
4	984398.PL	Almondene Bärandal...	Almondene Charger	5	3	8	0	0	1

Follow these steps:

- go to Litter table using the drop menu from the Database button
- type the litter reg # and hit F5 to add the record
- type each field and hit Enter to move to the next field
- some fields, like sire and dam have a drop list to select from

It is important that you enter a Litter Reg No. even if one is not required because the next step is to go to the "Puppy Records" or "Kitten Records" etc table and add a record for each offspring in the litter. Each of those records must have its "Litter Reg No." field filled in with the same value you entered in the Litter record as shown below.


Pedigree Publisher - C:\Users\Public\Documents\Breedmate\DogSampleData.db - Pedigree
FILE EDIT SEARCH MARK TOOLS VIEW HELP
Back
Navigator
Database
Pedigrees
Shows
Forms
Reports
Data Doc
MergeManager
Tools
439827
Add Record (F5)
Find (F10)
Find Entry (F9)
Find Similar
Find Mark
Sort
Field order
View All
Puppy Id No.
Registered Name
Registered No.
Litter Reg No.
Date of Birth
Date Sold.
Date Died.
Date Reg Appl.
Date Reg Ctf.
0 439827 523542435
1 98987 Aurella Kansas Cunie... H987909 934287.AG 1975-10-23 1976-01-02 1975-12-15 1975-12-17
2 98988 Aurella Sanjay Sarson J98798 934287.AG 1975-10-23 1976-01-05 1975-12-15 1975-12-17
Edit All Records
Forms
Text Reports
Events
Pedigree Calculations
Merge Manager
Opened file 'C:\Users\Public\Documents\Breedmate\DogSampleData.db'.

31 Titles, Colors, Countries Tables

When you enter data into the Titles, Obedience and Color fields etc, Pedigree Cloud creates matching entries for these fields just as it does for sires and dams. To see these matching entries right click on a cell in that column and select **View Lookups**.

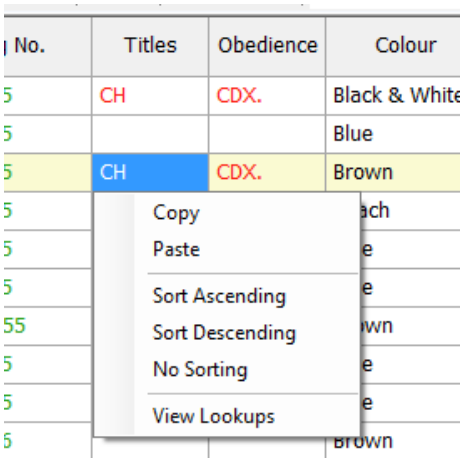


Figure 23.1 - _PreTitle Table

	Title	_Marks
0	Am CH	0
1	Am UK CH	0
2	Aust CH	0
3	CH	0
4	Int CH	0
5	Swed CH	0
6	UK CH	0

The records matching entries from a number of fields in the Pedigree table. You can edit entries in these table. You can delete records or add new ones or edit existing ones. If e.g. you add the color “Yellow” to the _Color table then when you return to the Pedigree table and click on the Color field, the combobox on the toolbar will provide a drop down list that now also includes Yellow.

Entries are added to these lookup tables by Pedigree Cloud mainly by the addition of matching entries.

32 Registration Table/Forms

The "HerdKeeper" version of Pedigree Cloud (designed for goats etc) stores all registration information in the registration table. Each record in this table corresponds to one registration. The data can be entered using the database view (hit F6 then enter in details) or use the "Enter Registration" form by clicking on the "Dialogs" button.

Once you have entered the information you can then display the completed registration form by clicking on the "Breeding" button and selecting the appropriate form. Currently we have ADGA, KGBA and NPGA forms.

Note that not all fields are required for some forms.

Note also that there does appear to be repeated information in this table and the Pedigree table. There are reasons for this – principally that you need to freeze the information you entered for that form so you refer back to it later. If we simply repeated information from the Pedigree table then the original registration forms contents may change when you make changes to the Pedigree table.

There is some additional information which is obtained from linked tables. In particular the breeder, owner and transferred to fields will use information from the Contacts table such as address, membership no's etc. It is therefore important that you have a matching record for these fields in the Contacts table. The names must match exactly (case is not important) or there will be missing address information. To check if the fields have a matching record click on a filed like Owner then the use Find-Key command.

33 Sharing Data

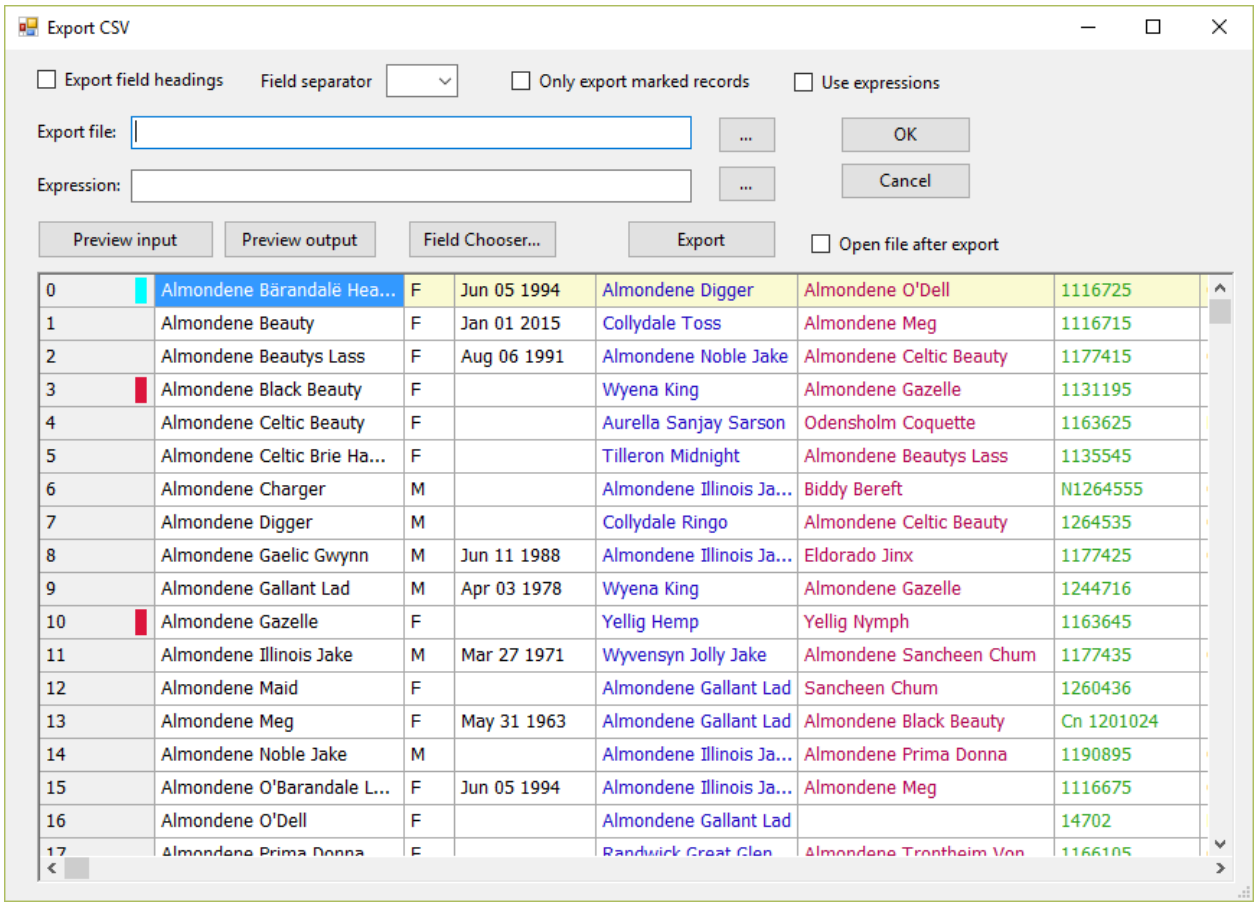
Pedigree Cloud allows data to be shared in the following formats:

- Imported and export a file in CSV (comma separated value text) format (*.csv files). This is a format that is supported by most spreadsheet programs such as Microsoft Excel.
- Merging a different database into your current database
- Import and export a XML file in OPSX format
- Copy and paste text in Excel format (tab between fields and CR/LF at end of each record).

These formats are explained in the following sections.

33.1 Exporting a CSV File

Use the **TOOLS-Export CSV** command. This will bring up the dialog similar to that shown below:



0	Almondene Bärandalë Hea...	F	Jun 05 1994	Almondene Digger	Almondene O'Dell	1116725
1	Almondene Beauty	F	Jan 01 2015	Collydale Toss	Almondene Meg	1116715
2	Almondene Beautys Lass	F	Aug 06 1991	Almondene Noble Jake	Almondene Celtic Beauty	1177415
3	Almondene Black Beauty	F		Wyena King	Almondene Gazelle	1131195
4	Almondene Celtic Beauty	F		Aurella Sanjay Sarson	Odensholm Coquette	1163625
5	Almondene Celtic Brie Ha...	F		Tilleron Midnight	Almondene Beautys Lass	1135545
6	Almondene Charger	M		Almondene Illinois Ja...	Biddy Bereft	N1264555
7	Almondene Digger	M		Collydale Ringo	Almondene Celtic Beauty	1264535
8	Almondene Gaelic Gwynn	M	Jun 11 1988	Almondene Illinois Ja...	Eldorado Jinx	1177425
9	Almondene Gallant Lad	M	Apr 03 1978	Wyena King	Almondene Gazelle	1244716
10	Almondene Gazelle	F		Yellig Hemp	Yellig Nymph	1163645
11	Almondene Illinois Jake	M	Mar 27 1971	Wyvensyn Jolly Jake	Almondene Sancheen Chum	1177435
12	Almondene Maid	F		Almondene Gallant Lad	Sancheen Chum	1260436
13	Almondene Meg	F	May 31 1963	Almondene Gallant Lad	Almondene Black Beauty	Cn 1201024
14	Almondene Noble Jake	M		Almondene Illinois Ja...	Almondene Prima Donna	1190895
15	Almondene O'Barandale L...	F	Jun 05 1994	Almondene Illinois Ja...	Almondene Meg	1116675
16	Almondene O'Dell	F		Almondene Gallant Lad		14702
17	Almondene Prima Donna	F		Randwick Great Glen	Almondene Trontheim Von	1166105

Note that fields which are “hidden” still hold their place but no data for that field is exported. Hidden fields are shown with a light grey text color,

Use the dialog as follows:

- First enter the name of the file to which the CSV data will be exported. Use the Browse button to assist if required.
- The fields which are exported can be set via the Field Chooser button The “Select All Fields” button will set all fields on for export.
- Note: Fields will be automatically enclosed in double quotes if the field contains either commas (or whichever separator has been selected) or double quotes.

- Select “Export field headings” to get have a first line with the field names.
- Select “Only export marked records” as an option.
- Set the maximum number of records per CSV file. This useful if you are exporting a very large file as it will split the data across several files. The files will have the name you specified but with a sequence number in parentheses at the end of the name, so if you select “XYZ.CSV” and three files were created then they would be called XYZ (1).CSV, XYZ (2).CSV and XYZ (3).CSV.
- Set the “Export Import separator” to which ever character you want to separate the exported fields.
- Click on the “Export” button to export only those fields as set by the check boxes.
- Note: PedCloud detects the last non-empty field in each record and only outputs up to and including that field. This avoids generating large numbers of empty fields with commas at the end of each record and usually halves the exported file size.

Pedigree Cloud will output the database table that is currently active to a CSV format file. Be sure that you give the converted file the CSV extension; the name of the new file should be in the form: filename.csv.

The format of the CSV file (Comma Separated Values) is fields enclosed in double quotes and separated by commas, e.g. “Name”, “Sex”, “27/7/2006” etc. If a field contains a double quote character then it is escaped by a preceding double quote. This is the format used by Excel.

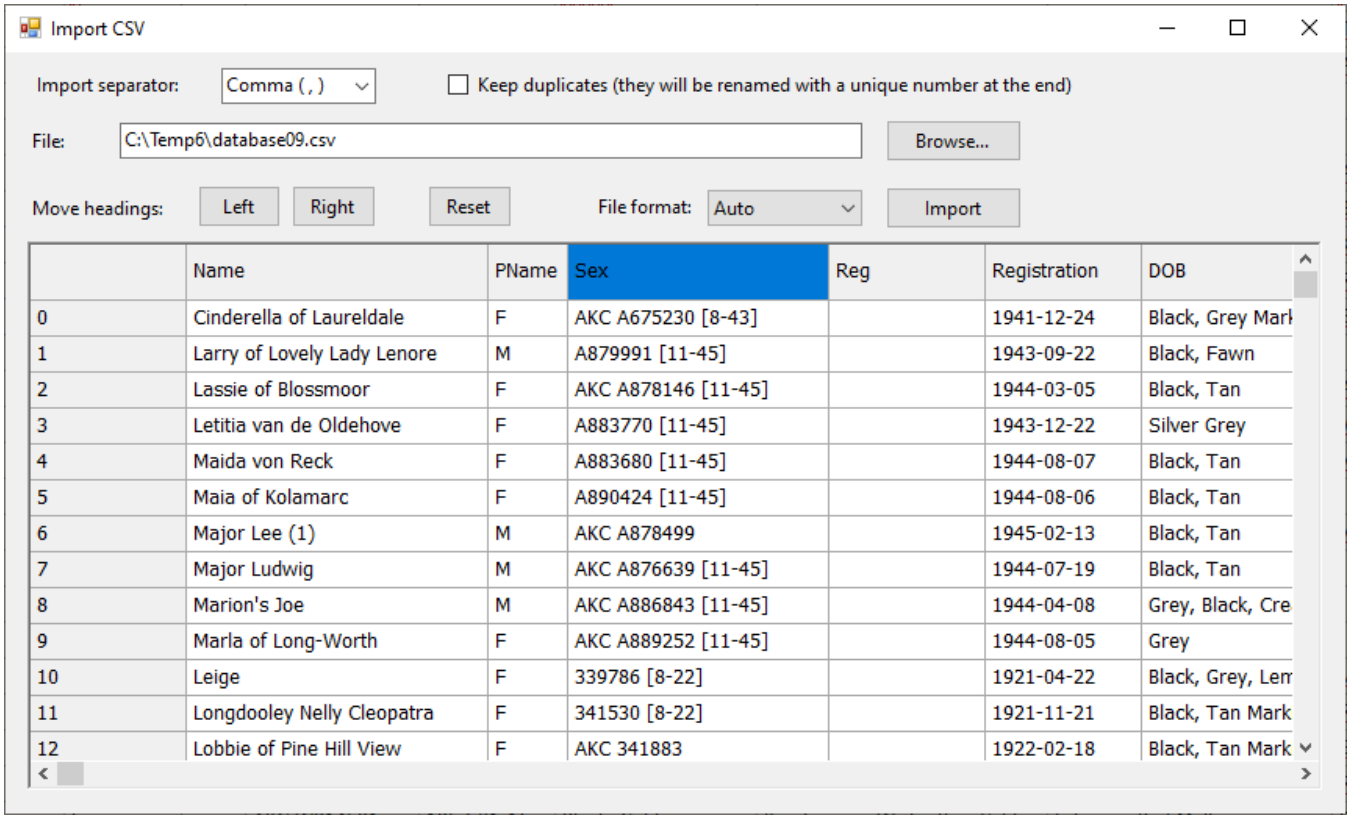
33.2 Importing a CSV File

Use the command **TOOLS-Import CSV** to import a file in CSV format into your database.

The file importer expects data in the following format:

- CSV text format, i.e. one line per record with each field separated by commas or other user specified separator and with the field data optionally enclosed in double quotes.
- Date format in your database must be the same as in the data being imported. Again you could use Notepad to confirm what the date format is. To change the date format in your current database, click on the design button (green triangle), got to the format column of the DOB field and select the appropriate format. After the import, you can change the date format back.

When using this command the following dialog appears:



	Name	PName	Sex	Reg	Registration	DOB
0	Cinderella of Laureldale	F	AKC A675230 [8-43]		1941-12-24	Black, Grey Mark
1	Larry of Lovely Lady Lenore	M	A879991 [11-45]		1943-09-22	Black, Fawn
2	Lassie of Blossmoor	F	AKC A878146 [11-45]		1944-03-05	Black, Tan
3	Letitia van de Oldehove	F	A883770 [11-45]		1943-12-22	Silver Grey
4	Maida von Reck	F	A883680 [11-45]		1944-08-07	Black, Tan
5	Maia of Kolamarc	F	A890424 [11-45]		1944-08-06	Black, Tan
6	Major Lee (1)	M	AKC A878499		1945-02-13	Black, Tan
7	Major Ludwig	M	AKC A876639 [11-45]		1944-07-19	Black, Tan
8	Marion's Joe	M	AKC A886843 [11-45]		1944-04-08	Grey, Black, Cre
9	Marla of Long-Worth	F	AKC A889252 [11-45]		1944-08-05	Grey
10	Leige	F	339786 [8-22]		1921-04-22	Black, Grey, Lem
11	Longdooley Nelly Cleopatra	F	341530 [8-22]		1921-11-21	Black, Tan Mark
12	Lobbie of Pine Hill View	F	AKC 341883		1922-02-18	Black, Tan Mark

The dialog should be used as follows:

- First select a file to read in by typing or pasting into the “File:” edit box the file’s path or use the Browse button to select the file.
- The grid displays the input file based on the current setting for the field separator which can be chosen from the combobox at the top of the dialog.
- If input fields are not appearing in the correct column select one or more contiguous fields, then click either the left or right button to move the selected header field in that direction. Note the data columns do NOT move, only the column heading, i.e. which column the data goes into.
- PedCloud requires each name to be unique, whereas some other programs might use the registration number as the unique key or a combination of fields. Hence if the name of a record (i.e. the contents of the name field) is the same as an existing record or the same as another record in the data being imported then that record will be discarded.
- The grid shows a preview of the input data. Click the Import button to actually load the input data. After doing so the dialog will disappear and the Table view will be updated.

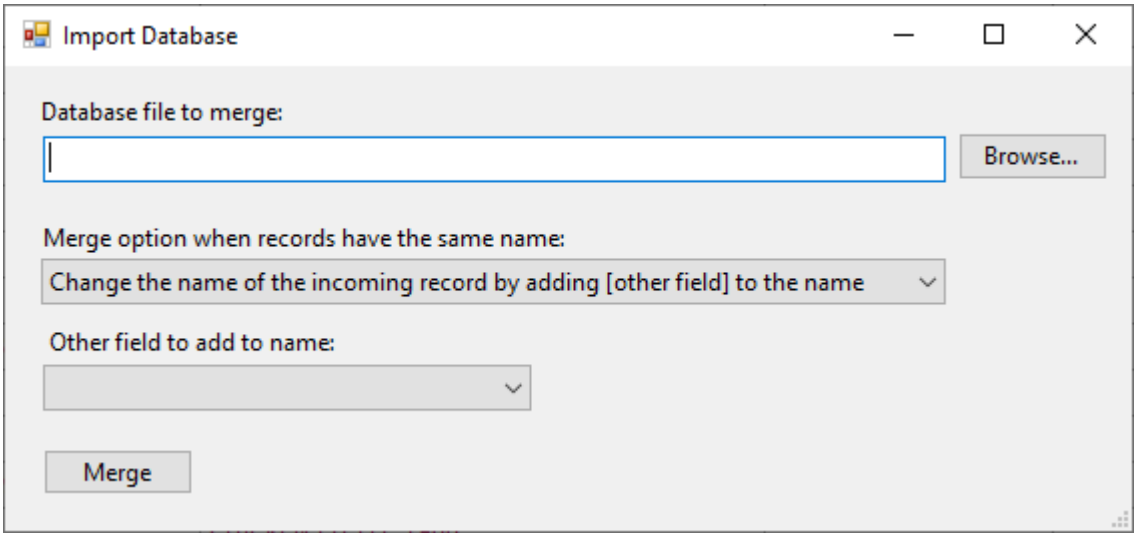
33.3 Merging a Database File

The **FILE-Merge Database** will merge another Pedigree Cloud database into your currently open database file. This is a completely automatic function once initiated. Note there is also an interactive database compare and merge facility called Merge Manager which is described in Section 18. After selecting this command a dialog appears as shown below.

Use the dialog as follows:

- Enter the name of the source database in the “Database file to Merge:” field. Use the “Browse…” button if you wish to search for the file.
- Select the “Merge option…” from one of the following: "Combine them, only filling in blanks in current database record", "Don't import records with the same name", "Change the name of the incoming record by adding [other field] to the name"

- If the "Change the name…" option is selected then you should also select “Other field to add to name”. In this case when there is a name collision, the incoming record will have its name altered by adding the contents of the specified field in square brackets. If the other field is "Country" and that field contains say “Denmark” then “Fred” would be changed to “Fred [Denmark]”.
- If the “Combine them…” option is selected then if a record already exists for a given name, then data from the source record may be merged into any blank field in the destination record.
- Lastly press the OK button to begin the merge.



Note: The Merge Manager feature will also merge in a file but allows the user to interactively compare the merging database with current database.

33.4 Importing Data from Excel

This can be done by either saving your Excel data as a CSV file and then using the **TOOLS-Import CSV** command or simply copy the data from Excel using **EDIT-Copy** (first selecting the relevant rows and columns), then switching to PedCloud and its Grid view and using the **EDIT-Insert Records** command.

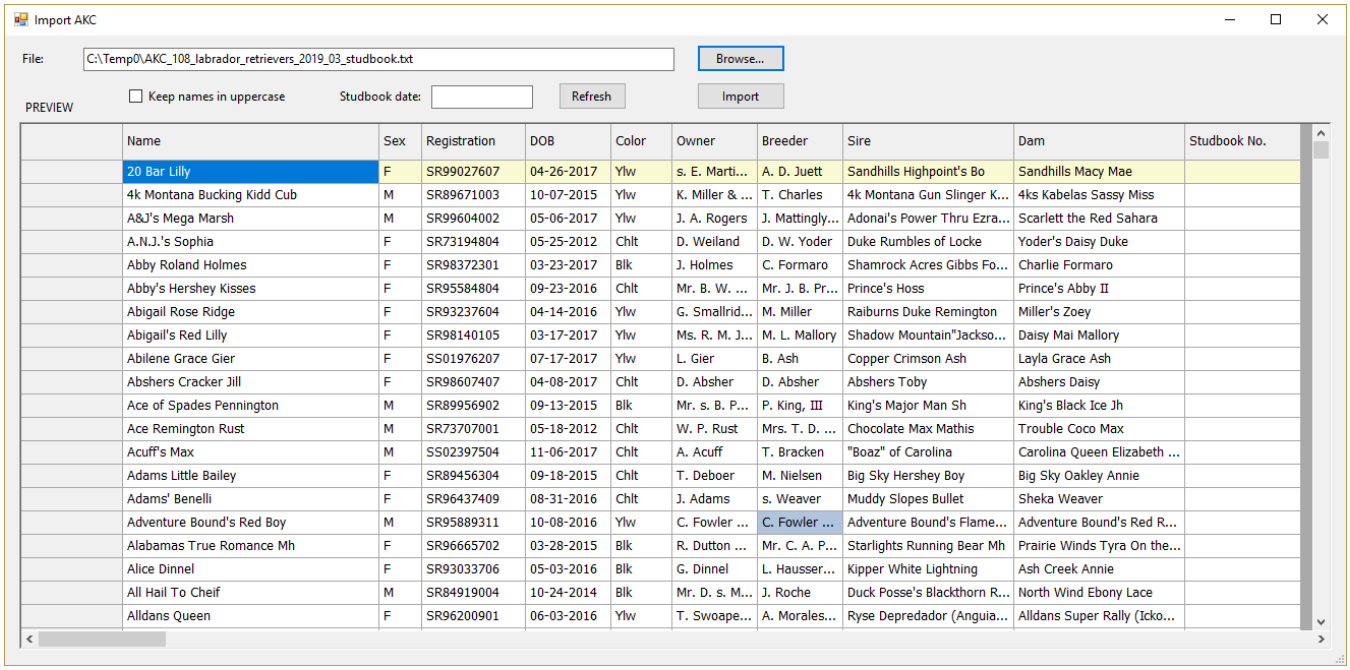
There are however two things you must do:

- Make sure that the columns in Excel are in the same order as they appear in PedCloud, i.e. the first column must be name, then sex, date of birth, sire, dam etc.
- The format of your dates must be the same as displayed in PedCloud. You can either change the date in Excel first, or before importing or pasting, set the date format in PedCloud.

33.5 Importing AKC files

To import AKC files use the “TOOLS-Import AKC File..." command. AKC files a pipe (|) separated data files, similar to comma separated files except the separator is a pipe symbol (|). The columns in each file are: dog_name|dog_sex|dog_number|whelp_date|dog_color|owner_breeder|sire_name|sire_number|sire_studbook_date|dam_name|dam_number|dam_studbook_date|dog_country|sire_country|dam_country.

When the menu command is used it will bring up a dialog as shown below.



	Name	Sex	Registration	DOB	Color	Owner	Breeder	Sire	Dam	Studbook No.
	20 Bar Lilly	F	SR99027607	04-26-2017	Ylw	s. E. Marti...	A. D. Juett	Sandhills Highpoint's Bo	Sandhills Macy Mae	
	4k Montana Bucking Kidd Cub	M	SR89671003	10-07-2015	Ylw	K. Miller & ...	T. Charles	4k Montana Gun Slinger K...	4ks Kabelas Sassy Miss	
	A&J's Mega Marsh	M	SR99604002	05-06-2017	Ylw	J. A. Rogers	J. Mattingly...	Adonai's Power Thru Ezra...	Scarlett the Red Sahara	
	A.N.J.'s Sophia	F	SR73194804	05-25-2012	Chlt	D. Weiland	D. W. Yoder	Duke Rumbles of Locke	Yoder's Daisy Duke	
	Abby Roland Holmes	F	SR98372301	03-23-2017	Blk	J. Holmes	C. Formaro	Shamrock Acres Gibbs Fo...	Charlie Formaro	
	Abby's Hershey Kisses	F	SR95584804	09-23-2016	Chlt	Mr. B. W. ...	Mr. J. B. Pr...	Prince's Hoss	Prince's Abby II	
	Abigail Rose Ridge	F	SR93237604	04-14-2016	Ylw	G. Smallrid...	M. Miller	Raiburns Duke Remington	Miller's Zoey	
	Abigail's Red Lilly	F	SR98140105	03-17-2017	Ylw	Ms. R. M. J...	M. L. Mallory	Shadow Mountain"Jackso...	Daisy Mai Mallory	
	Abilene Grace Gier	F	SS01976207	07-17-2017	Ylw	L. Gier	B. Ash	Copper Crimson Ash	Layla Grace Ash	
	Abshers Cracker Jill	F	SR98607407	04-08-2017	Chlt	D. Absher	D. Absher	Abshers Toby	Abshers Daisy	
	Ace of Spades Pennington	M	SR89956902	09-13-2015	Blk	Mr. s. B. P...	P. King, III	King's Major Man Sh	King's Black Ice Jh	
	Ace Remington Rust	M	SR73707001	05-18-2012	Chlt	W. P. Rust	Mrs. T. D. ...	Chocolate Max Mathis	Trouble Coco Max	
	Acuff's Max	M	SS02397504	11-06-2017	Chlt	A. Acuff	T. Bracken	"Boaz" of Carolina	Carolina Queen Elizabeth ...	
	Adams Little Bailey	F	SR89456304	09-18-2015	Chlt	T. Deboer	M. Nielsen	Big Sky Hershey Boy	Big Sky Oakley Annie	
	Adams' Benelli	F	SR96437409	08-31-2016	Chlt	J. Adams	s. Weaver	Muddy Slopes Bullet	Sheka Weaver	
	Adventure Bound's Red Boy	M	SR95889311	10-08-2016	Ylw	C. Fowler ...	C. Fowler ...	Adventure Bound's Flame...	Adventure Bound's Red R...	
	Alabamas True Romance Mh	F	SR96665702	03-28-2015	Blk	R. Dutton ...	Mr. C. A. P...	Starlights Running Bear Mh	Prairie Winds Tyra On the...	
	Alice Dinnel	F	SR93033706	05-03-2016	Blk	G. Dinnel	L. Hausser...	Kipper White Lightning	Ash Creek Annie	
	All Hail To Cheif	M	SR84919004	10-24-2014	Blk	Mr. D. s. M...	J. Roche	Duck Posse's Blackthorn R...	North Wind Ebony Lace	
	Alldans Queen	F	SR96200901	06-03-2016	Ylw	T. Swoape...	A. Morales...	Ryse Depredador (Anguia...	Alldans Super Rally (Icko...	

The steps to use the dialog are:

- Select the “Keep names in uppercase” option to keep all names in upper case, or don’t select it to convert all the names from ALL CAPS to title case
- Enter a “Studbook date”. This will go into the “Studbook No.” column when imported.
- Click the Browse button to select the AKC file.
- After viewing the PREVIEW, if you change the above options, click the “Refresh” button to apply to the preview.

The processing it does on the AKC file to display the above dialog is as follows:

- It ignores these columns: sire_number, sire_studbook_date, dam_studbook_date, sire_country, dam_country
- It splits the owner_breeder column into separate Owner and Breeder fields
- It puts the following columns in these Pedigree table fields: dog_name => Name, dog_sex => Sex, dog_number => Registration, whelp_date => DOB, dog_color => Color, sire_name => Sire, dam_name => Dam, dog_country => Country of Origin
- Fixes DOB date which has only two digit year.
- If there is an existing record in the database with the same case insensitive name then it uses that for the Name, Sire and Dam fields.
- If there is an existing record with the same name then the AKC import record is not loaded.
- If there are no records that match the Sire and Dam being imported then a matching record is created and the Sex automatically filled.

After viewing the preview, click the “Import” button to import he AKC file into the database.

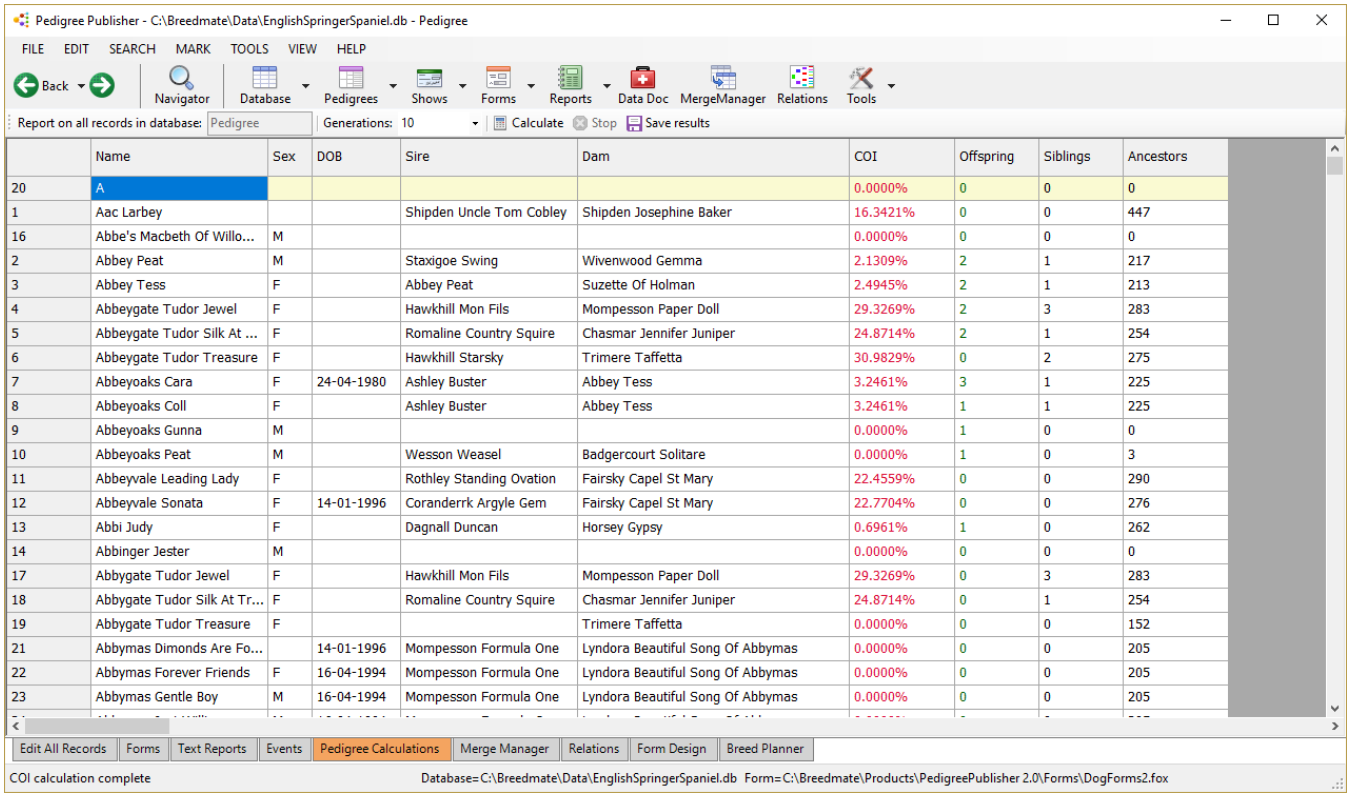
34 Inbreeding & Relationship Coefficients

35 Pedigree Calculations

As well as the bulk COI calculator in the previous section we also have a separate view called “Pedigree Calculations” that can be access either from the toolbar TOOLS drop down button, or by clicking on the “Pedigree Calculations” tab at the bottom of the screen.

It is fairly simple to use. Just select the number of generations to calculate COI to and then click the Calculate button. If you want to save the results to a CSV file then click the “Save results” button.

The number of generations is selectable from 5, 10, 15, 20, All. You can also type in a specific number of generations. Note that the “All” option uses a different and much FASTER method to calculate. For example for a database of 30,000 records it could take about 9 seconds to calculate the COI for all records for ALL generations, but if you select 20 generations it takes over a 100 seconds which is 10 x slower. The reason we even allow the option of selecting the number of generations is that some users prefer it that way.



	Name	Sex	DOB	Sire	Dam	COI	Offspring	Siblings	Ancestors
20	A					0.0000%	0	0	0
1	Aac Larbey			Shipden Uncle Tom Cobley	Shipden Josephine Baker	16.3421%	0	0	447
16	Abbe's Macbeth Of Willo...	M				0.0000%	0	0	0
2	Abbey Peat	M		Staxigoe Swing	Wivenwood Gemma	2.1309%	2	1	217
3	Abbey Tess	F		Abbey Peat	Suzette Of Holman	2.4945%	2	1	213
4	Abbeygate Tudor Jewel	F		Hawkhill Mon Fils	Mompesson Paper Doll	29.3269%	2	3	283
5	Abbeygate Tudor Silk At ...	F		Romaline Country Squire	Chasmar Jennifer Juniper	24.8714%	2	1	254
6	Abbeygate Tudor Treasure	F		Hawkhill Starsky	Trimere Taffetta	30.9829%	0	2	275
7	Abbeyoaks Cara	F	24-04-1980	Ashley Buster	Abbey Tess	3.2461%	3	1	225
8	Abbeyoaks Coll	F		Ashley Buster	Abbey Tess	3.2461%	1	1	225
9	Abbeyoaks Gunna	M				0.0000%	1	0	0
10	Abbeyoaks Peat	M		Wesson Weasel	Badgercourt Solitare	0.0000%	1	0	3
11	Abbeyvale Leading Lady	F		Rothley Standing Ovation	Fairsky Capel St Mary	22.4559%	0	0	290
12	Abbeyvale Sonata	F	14-01-1996	Coranderrk Argyle Gem	Fairsky Capel St Mary	22.7704%	0	0	276
13	Abbi Judy	F		Dagnall Duncan	Horsey Gypsy	0.6961%	1	0	262
14	Abbinger Jester	M				0.0000%	0	0	0
17	Abbygate Tudor Jewel	F		Hawkhill Mon Fils	Mompesson Paper Doll	29.3269%	0	3	283
18	Abbygate Tudor Silk At Tr...	F		Romaline Country Squire	Chasmar Jennifer Juniper	24.8714%	0	1	254
19	Abbygate Tudor Treasure	F			Trimere Taffetta	0.0000%	0	0	152
21	Abbymas Dimonds Are Fo...		14-01-1996	Mompesson Formula One	Lyndora Beautiful Song Of Abbymas	0.0000%	0	0	205
22	Abbymas Forever Friends	F	16-04-1994	Mompesson Formula One	Lyndora Beautiful Song Of Abbymas	0.0000%	0	0	205
23	Abbymas Gentle Boy	M	16-04-1994	Mompesson Formula One	Lyndora Beautiful Song Of Abbymas	0.0000%	0	0	205

36 Text / HTML Reports

While many of the forms available in PedCloud are graphical, there are also text based reports available. The advantage of text reports is that they are emailable. To include a report, use the **EDIT-Copy** command then paste into your email.

The text reports also include HTML reports. HTML reports are simply text with some special character sequences added. To produce an HTML file, from the toolbar use the **View in browser** command. This will save it in the "C:\Users\Public\Documents\Breedmate" folder as a file called "temp.html". If the page included a photo then it will be stored in the Photos sub-folder of the above folder.

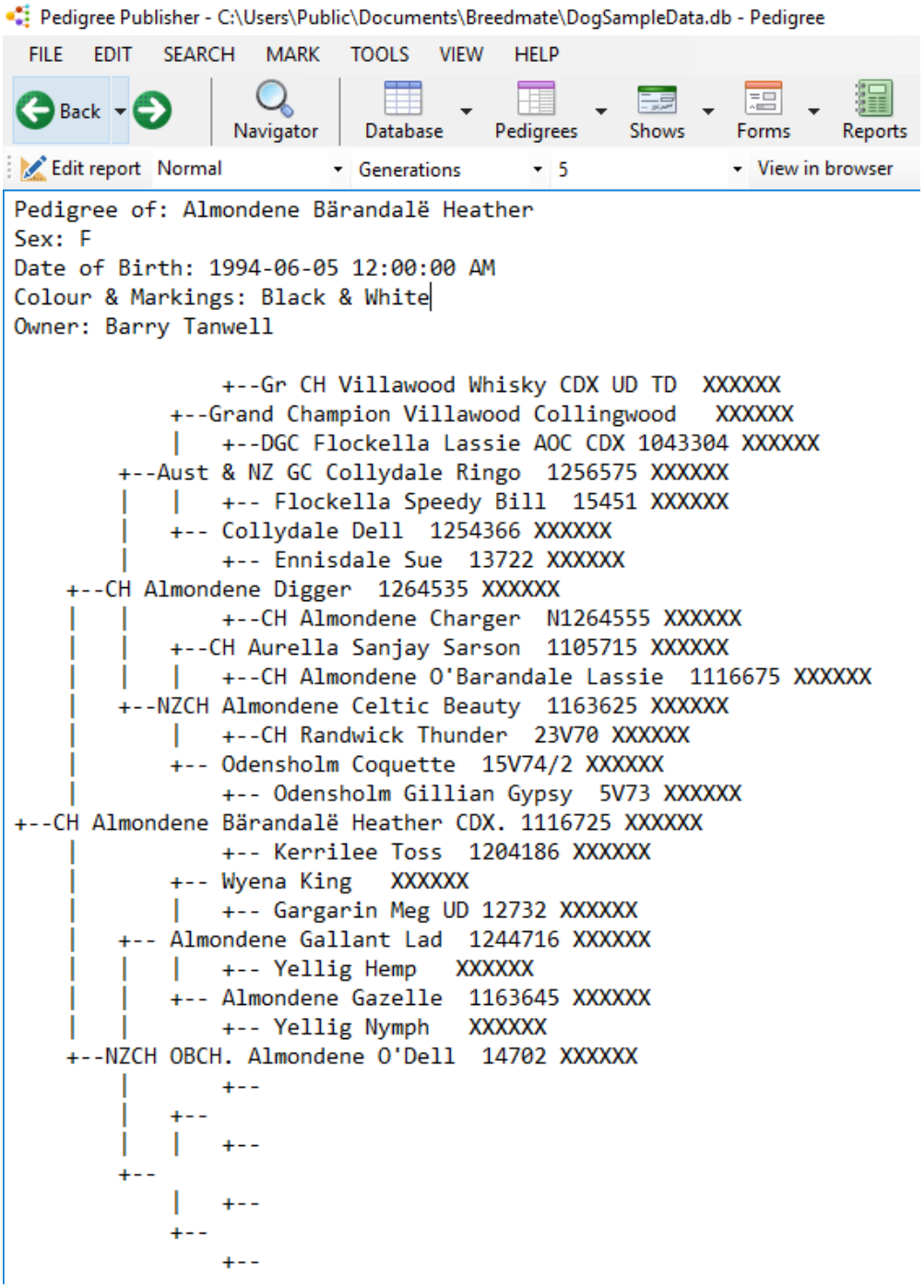
Some sample text reports are described in the following sections.

36.1 4-10G HTML Pedigree

This one HTML pedigree can be easily configured for 4 to 10 generations by simply selecting the number of generations from the toolbar.

36.2 3-10G Text Pedigree

This one report can be changed to be any number of generations from 3 to 10 by selecting the Generation from the toolbar. A sample of the 4G pedigree is shown below. The information shown in each generation is user definable.



36.3 Siblings Report

The siblings report lists full siblings, sire siblings and dam siblings in individual groups with a heading containing the sire and or dam as appropriate. A sample is shown below.

SIBLINGS of: A Prospect of Limerick HM610422/01
Date of Birth: 11/30/1995
Colour & Markings: Gr Brdl
Owner:

FULL SIBLINGS (Windfern's Tiger Fannin HM296004/05, Blanche Fleur
 Babydoll of Dover HM610422/06
 Grendel of Dover HM610422/02
 Lusso HM610422/03
 Maggie May Tir Na Nog HM610422/05

SIRE SIBLINGS (Windfern's Tiger Fannin HM296004/05)
 Babydoll of Dover HM610422/06
 Grendel of Dover HM610422/02
 Lusso HM610422/03
 Maggie May Tir Na Nog HM610422/05

DAM SIBLINGS (Blanche Fleur HM365948/05)
 Babydoll of Dover HM610422/06
 Grendel of Dover HM610422/02
 Lusso HM610422/03
 Maggie May Tir Na Nog HM610422/05

36.4 Sire/Dam Line

A sample sire line is shown below. The information and layout are definable by the user.

```
SIRE LINE for:  A Prospect of Limerick  HM610422/01
Date of Birth: 11/30/1995
Colour & Markings: Gr Brdl
Owner:

SIRE LINE

SIRE                                                DAM
Windfern's Tiger Fannin  HM296004/05.............Blanche Fleur  HM365948/05
USA Ch Windfern's Regan of Dundrum II  HD483452...USA Ch Windfern's Serendipity  HD539428
USA Ch Sedeki Dagda  HD020773....................USA Ch Dundrum's Faren Fionna  HD084241
USA CDN Ch Sedeki Arklow The Grey  HC643891.......Sedeki Bridgit  HC977446
CDN USA Ch Brabyns Gog Ma Gog  HC509152 KCSB 1985BKGB USA Ch Brabyns Bleisce of Sedeki  HC614
GB Ch Fintan of Eaglescrag  KCSB 1591BH KCR 7563/71Cailte of Brabyns  KCSB 241BG
GB Ch Red Wully of Eaglescrag  KCSB 2598BA.......Eaglescrag Alice of Nendrum  KCSB 2602BA
GB Ch Eaglescrag Clonroe of Nendrum  KCSB 1858AX KCR 25745/63GB Ch Moira of Eaglescrag  KCSB
GB IRL Ch Sulhamstead Max  KCR 90650/59 KCSB 2419ATIRL GB Ch Carol of Eaglescrag  KCSB 1901AF
GB Ch Sulhamstead Fellus  KCSB 2076AM............GB Ch Sulhamstead Mystic  KCSB 650AS
GB USA Ch Sanctuary Rory of Kihone  KCSB 1733AL...Sulhamstead Felcara  KCSB 2326AG
Taddeus of Kihone  H94213........................Chalet Cam  H2163
USA Ch Killary of Ambleside  A714226.............USA Ch Laith of Kihone  A968583
Padraic of Summerhill  A558100...................Teanhra of Ambleside  A510049
Kilshane of Ambleside  A201783...................Finnola The Fay of Ambleside  A198771
Ambleside Finn of Erinn  994339..................Deborah Dhu of Ambleside  879120
USA Ch Brannish of Ambleside  747365.............Biddy of Ambleside  879115
USA Ch Killabrick  629676........................Dacia of Ambleside  475163
Briary of Ifold  479015..........................USA Ch Mona of Ambleside  471345
Owen Oge of Rockburn  ...........................Tess of Ifold  KCSB 20DD
GB Ch Courage of Grevel  KCSB 303CC..............Destiny of Grevel
GB Ch Felixstowe Kilgerran  KCSB 448W............Sarah
USA Ch Felixstowe Navan  223096 KCSB 124W........Felixstowe Cloone  KCSB 822V
GB Ch Lindley Hector  KCSB 698S..................GB Ch Felixstowe Kilrush  KCSB 692S
Silver King  ....................................Fillongley Queen
Leinster  KCSB 610H Graham 533?..................GB Ch Lufra Rhu  139652 KCSB 890K Graham 57
GB Ch Marquis of Donegal  KCSB 581C Graham 344....Nuala  KCSB 582F Graham 338
GB Ch Dermot Astore  KCSB 96-141B Graham 286.....Cheevra (1892)  KCSB 660B Graham 170
Brian II  KCSB 39938 Graham 203..................Nookoo  Graham 201
Gara /or/ Fingal  ...............................Zarah  KCSB 33041 Graham 111
```

36.5 Offspring

The offspring report groups offspring according to mating. A sample is shown below.

```
OFFSPRING of: IRL Ch Turlough of Morrell  KCSB 2578BF
Date of Birth: 8/7/1969
Colour & Markings: Gr
Owner: McCoy

BREEDINGS

1. Breeding -  Avonmore  IKC B1227
   1.  Ballykelly Wogan  KCSB 2044BK

2. Breeding -  Cu-uladh Moira
   1.  Ballynure Eileen  KCSB 2793BI

3. Breeding -  Carrokeel Oonagh  KCSB 3492BJ
   1.  Cu-uladh Slieve Miskish
   2.  Cu-uladh Uladh  KCSB 707BJ
   3.  Cuuladh Chonuacht  KCSB 3491BJ
   4.  Cuuladh Slieve Binnian  HB789954
   5.  Cuuladh Slieve Gallion  HB789955
   6.  Cuuladh Slieve Rushen  HC009203

4. Breeding -  Tullygirvan Kerry
   1.  Seagoe Barry  KCSB 3490BJ
   2.  Seagoe Milo of Clanoc
```

37 Emailing Pedigrees

37.1 Text Pedigrees – not supported

These are the easiest to email and is supported by all email programs.

First select the entry you wish display in this report by clicking on it in the Grid view, then select the text pedigree you want by selecting it from the Reports button . Use Ctrl-A to select all, then Ctrl-C to copy the text to the clipboard, then open a new email and paste it in using Ctrl+V.

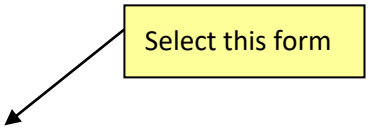
37.2 Form Pedigrees

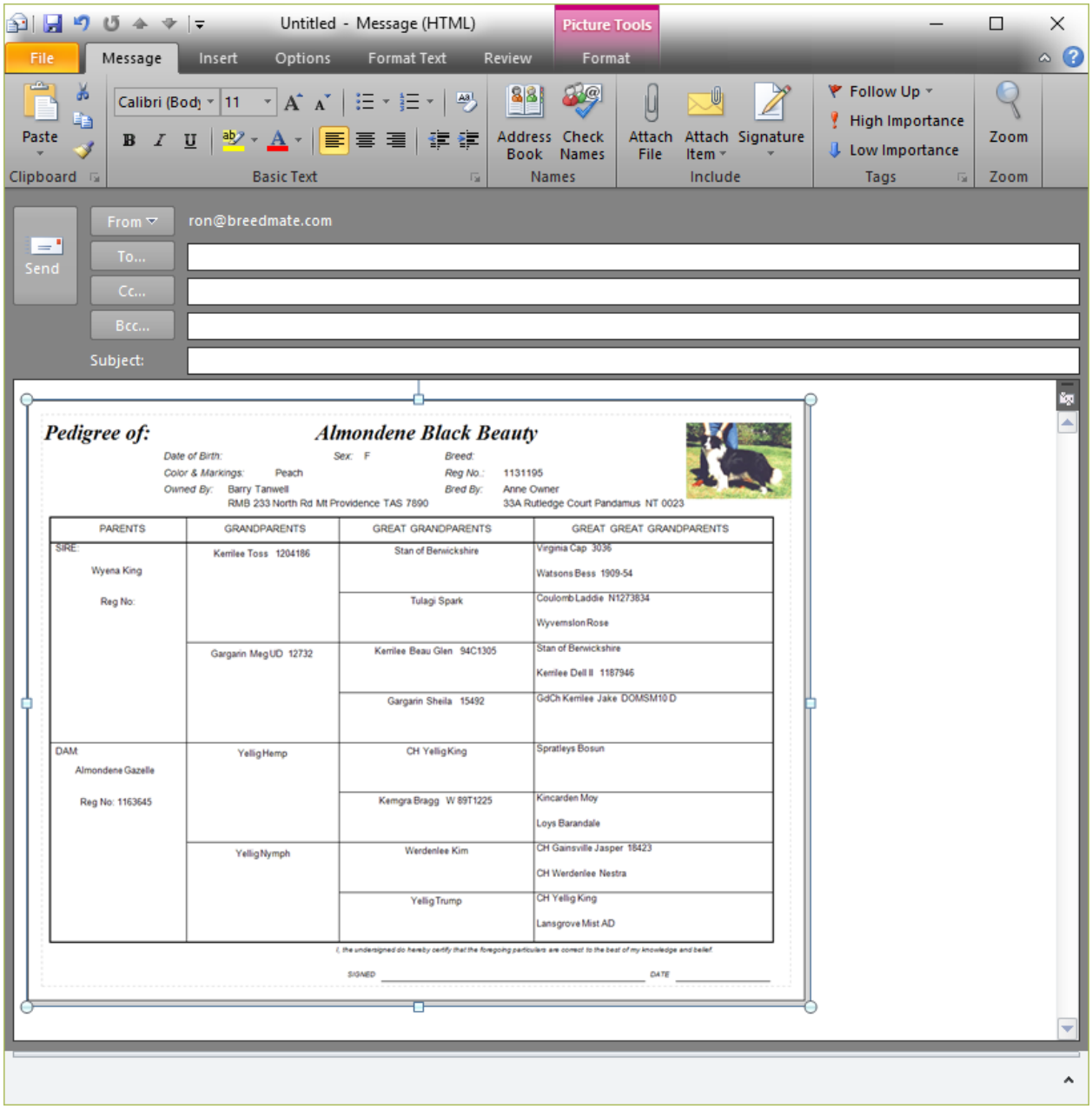
Form type pedigree can be also be inserted into emails though the method will vary depending on the email software as outlined n the following sections.

37.2.1 Microsoft Outlook

Just select the pedigree form and entry, then use **EDIT-Copy**.

In your Outlook email, click where you want the pedigree to go and use Ctl+V to paste the image.. The use **EDIT-Copy as Image** to copy the image to the clipboard. This format can be easily pasted into almost any application including email, as shown below where we have an Outlook email window.





Note your email must be in HTML format.

38 Ownership Records

This section describes how to enter data to display on the Ownership Record form under the Breeding button.

The top half of the Ownership form contains information from the Pedigree table and the Ownership table while the bottom part of the form contains data from the Heats/Mates table. Note you can switch between tables by clicking on the relevant table under the Database section of the Chooser bar.

Follow these steps:

1. Create a record in the Pedigree table if one doesn't already exist. Note the ownership form uses a lot of information from this record such as the sire, dam, registration #, color. To create a record simply type a name in Grid view and hit the F5 key, then type data into each field hitting Enter to complete entering data in that field and moving to the next. You can also use the mouse to select a cell or the keyboard arrow keys. Note you may need to hit the ESC key to enable use of the arrow keys.
2. Create a record in the Ownership table. This table holds details such as "Date of Purchase", "Purchased From" etc.
3. Create a record for every mating your sire or dam has had. The dam's name goes in the "Dam's Name" field and the sire's name goes in the "Mated With" field.

That's it. To display your ownership form, switch to the Ownership table, select the record from the Grid view, then select the Ownership form from Forms/Breeding section of the Chooser bar. Note that if the ownership record is for a sire you must select the male version of the form and use the female version for the dam.

39 FAQ

FAQ stands for Frequently Asked Questions and is a common abbreviation on the net. We've lumped many common questions into this section.

39.1 No Forms Loaded

If you don't have a form file open then you won't be able to view any pedigrees. Use **FILE-Open** and open the appropriate form file, e.g. UsdogForms2.fox (US Dogs) or CatForms2.fox (non-US Cat forms).

39.2 Add a new entry

From the database view or form view enter the name of the entry in the edit box then click on the **Add Record** button or hit the F5 key or select **Add Record** from the **Edit** menu.

39.3 Remove an Unwanted Choice

When entering data in some fields the combo box on the toolbar will automatically drop down and offer a choice of items to insert. For example when entering in Sire or Dam you will be offered a choice of names from the Pedigree table and when entering into the Owner and Breeders fields you will be offered a list from the Name field of the Contacts table.

To remove or edit the choices, first right click on the cell and select "View Lookups". This will take you to the lookup table. To remove a choice, just delete the corresponding record. To edit a choice, edit the lookup record.

Note that if the lookup table is the Choices table then each record provides lookups for many fields so you shouldn't delete any records as this will affect other choices, but what you can do is move items in that column up or down or delete them using the Delete key.

39.4 Change data

The data in any cell can be changed by first clicking on it - the data will then appear in the edit box where it can be modified - then hit Enter. Note that after updating a cell, the current selection will move to the next cell on the right, thus facilitating entry of consecutive fields.

39.5 Copy the whole table to the clipboard

Click in the black rectangle in the top left corner of the database view then select **EDIT-Copy**.

39.6 Copy a range of entries to the clipboard

In the database view select the first entry by clicking in the index field (left most field containing the index number) then, while holding the SHIFT key down, select the last entry in the range by clicking on its index field then select **Copy** (Edit menu).

39.7 Copy all entries belonging to a particular kennel to a new database

Select any cell in the name field, type the kennel prefix in the edit box and select **Substring** from the Mark menu. Next select **Marked Only** from the View menu and then click in the black corner box to select all cells then select **Copy** (Edit menu). Create a new database and insert clipboard contents by selecting **Insert** (Edit menu).

39.8 Copy all ancestors of a selected entry to a new database

Select the entry then select **Ancestors** from the Mark menu. Next select **Marked Only** from the View menu and then click in the black corner box to select all cells then select **Copy** from the Edit menu. Create a new database and insert clipboard contents as above.

39.9 Copy the contents of one cell to another

Select the source cell, then click in that cell and drag across to the destination cell and release the mouse button. Note during dragging, the cursor changes to an arrow with a plus sign.

39.10 Delete an entry

Select any cell in the entry then select **EDIT-Delete Record** from the Edit menu or hit the F7 key.

39.11 Delete a range of entries

Select the range first by clicking on the top most cell then, holding shift down, click on the bottom most cell. Next select **EDIT-Delete Record**. Note in **Filter Marks** mode - only marked entries are deleted.

39.12 Delete all marked entries

Select the **Filter Marks** button then select all records by clicking in the black box in the top left of the view. Next select **EDIT-Delete Record** then turn off **Filter Marks** button.

39.13 Delete a column in the database.

Select a region containing all the data after this field, i.e. a region which contains the field immediately to the right of the field to be deleted and including the last field (rightmost) and including the first and last records in the table. Next use **EDIT-Cut** the select the first field (i.e. first record) of the field to be deleted, then use **EDIT-Paste**. The names of the fields will have to be individually updated.

Warning - the forms (e.g. pedigrees) are all designed to hook into particular fields based on their numeric order and if any fields are deleted then you may have to redesign some of the fields in some forms. In any case the sire and dam fields should never be moved.

39.14 Delete the contents of a region of cells.

First select the region (click on top left cell, then holding shift down select the bottom right cell). Next hit the **Delete** key.

39.15 Family tree or other form doesn't show ancestors.

PedCloud constructs a tree by looking for an entry's parents by matching the entry's sire or dam field against an entry with the same name. The problem of not showing ancestors is therefore due to sire or dam names not matching the name field of another entry. PedCloud ignores uppercase or lower case when matching, but it can fail to match if there are extra characters, e.g. spaces. If there are extra spaces at the beginning or end of a name or two or more spaces in between the words in a name then the match will fail.

The solution is to check the name carefully, or simply use copy and paste to transfer the name of one entry to the relevant sire or dam field of another entry.

Another possible cause of missing names is that an entry does not exist in the name of a sire or dam, e.g. you may have created an entry and filled in the sire and dam but not put the sire and dam in as entries (i.e. a record with their name in the name field). Unless an entry exists for the sire (or dam) they will not appear in a pedigree.

The solution is simple, just click on the sire (or dam) and hit F5 to create an entry in that name.

39.16 No Forms are loaded. Use File - Open and select *.FOX

This will occur if the forms file was closed, or could not be found. In fact this message can be issued even after the form is actually loaded.

If no form is loaded simply use **FILE-Open** and select a form. Note you may have click on the "List Files of Type" list box and select *.FOX before you will see any forms files. The form files are normally located in "Public Documents\Breedmate".

In the case where a forms file is loaded and the message still persists, just select the forms file by clicking on the Window menu and selecting the forms file.

39.17 Default Breed - can't change it

In the database view, use **VIEW-Set Default Breed** and put the required breed in the dialog box.

39.18 The pedigree form doesn't fit on the page

First select the form, then go into design mode by clicking on the green rectangle, then use **FILE-Print Setup** and ensure the Fit To Page is selected. Next you may have to move the text at the bottom of the pedigree downwards (this helps to pull the width in!). This can be done by selecting the text and lines and then using the down arrow cursor key to move the selected items down the page.

39.19 Selected field in Design View has Wrong Name

In design view, when you select a field, its value will be shown in the field combo box. The value shown will not be correct however, unless the record which surrounds it has been selected first thus setting the table combo to the correct value.

39.20 Asterisks Appear on Form

This will happen if you have an expression defined on a form and that expression refers to a field in a table that doesn't exist. This typically happens if users change the name of a field.

The solution is to either change the name back, or modify the expressions that refer to that field.

39.21 Pedigree Chart or Descendant Chart nodes are blank

You need to specify what fields you want to see – use **EDIT-Node Expression**.

39.22 Re-arrange fields

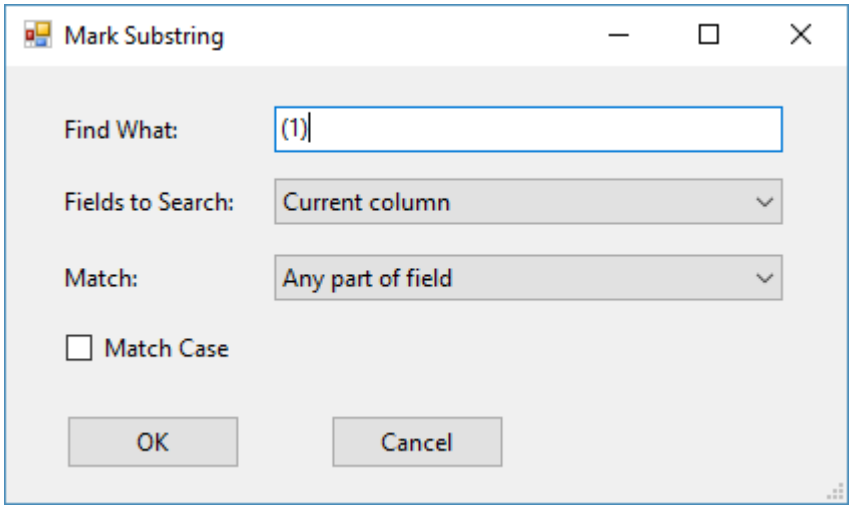
Use the **Field Chooser** toolbar button. A dialog appears – re-arrange the field order by moving them up or down or hiding them. Multiple fields can be selected. You can also create new field arrangements which you can then quickly switch between. To create a new arrangement, enter a name in the combobox and click on New.

39.23 Show only records for a given Kennel Name

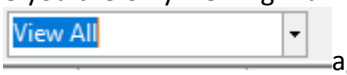
This is easily done using the various filtering commands. Use the **MARK-Substring** command to mark only those records where the name contains the given kennel name then click on the "View primary marks" on the toolbar.

39.24 I didn't remove duplicates when merging

So you may now have a lot of entries with names ending in (1) or (2). This is easily fixed. First use MARK-Clear All, then select the Name column, then MARK-Substring and use settings as shown below.



Click OK then from the toolbar select View Primary Marked. AT this point you should only see records that have a (1) in the name. Click on the Name column header then use F7 to delete all selected records.

No records will be displayed because you are only viewing marked records and there are no marked records so use from the toolbar select View All 

again to turn that option off.

40 Other Features

40.1 Neat Stuff – not supported

- To determine if all carriers of a specific genetic disease originate from one carrier use the **MARK-Common Ancestor** command (note you will need to mark the carriers first using **MARK-Substring**).
- When entering litters, be sure to use the **Copy Record** command (F6 key).
- It's easy to see lines of descent from a selected entry by selecting it then using **MARK-Descendants**.
- Data can be copied from or pasted to Word or Excel.
- Pedigrees can be saved as PNG files (like GIF files) so that they can be placed on web sites or sent via email.
- The font of the grid in the database view can be changed using **VIEW-Set Grid Font**.