

BenguFarm™
GAME
ADVANCED GAME
MANAGEMENT SOFTWARE



Manual

Version 18-06-2026

Compiled by

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www.bengufarm.co.za

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SECTION A – HOW TO START:

1. What does the BenguFarm software entail?

1.1 Types of Info for which BenguFarm makes provision:

BenguFarm GAME provides an easy-to-use, tried and trusted alternative to your own recording system. It is your all-in-one on-farm game management information system. It was developed for easy and efficient record keeping of an inventory of animals, movement of animals, evaluation of reproduction, horn lengths and growth and appearance for use in selection and breeding, day-to-day management, stock registers, expenditures and income, marketing and herd analysis. Which information is required from BenguFarm will of course determine which data must be recorded to get the relevant information.

1.2 BenguFarm Mobile app:

BenguFarm MOBILE is an application (app) which could be bought additionally. It is available for Android and Apple iOS operating systems to be used on a smartphone or tablet. BenguFarm MOBILE can be used to capture all important data on the spot while working with animals, e.g. at darting of animals. Data that can be captured include new animals (registration), pregnancy tests, semen tests, calvings, general notes, vaccinations, camp/group movements, feed and lick put out, tests for diseases, illnesses, treatments, sightings, scores, procedures, sales and deaths, camp activities and rainfall.

The information recorded on BenguFarm MOBILE are then synchronised with the BenguFarm database on the PC/laptop(s). Synchronisation of data can be done via Wi-Fi or Internet (cloud) connection, depending on which method is available and the method preferred by the user.

See the **BenguFarm MOBILE manual** for instructions to synchronise data between BenguFarm MOBILE and BenguFarm GAME.

2. How to use the manual:

Section A of the manual explains what needs to be done when starting with BenguFarm BEEF. **Section B** of the manual explains the record keeping and features required for the basic use of BenguFarm GAME. The items in the manual are basically listed in order as they will be done in practice. **Section C** of the manual explains additional / advanced features.

The steps to get BenguFarm GAME ready for further use are as follow:

1. Number all animals with a unique ID number. (see paragraph 3).
2. Install and register BenguFarm GAME. (see paragraphs 4, 5 and 6).
3. Do the necessary settings (herds [species], camps, Management groups). (see paragraph 8).
4. Import and/or manually create animal records. (see paragraphs 12 and 13).
5. Add data:
 - a. Record purchase data. (see paragraph 15).
 - b. Mark breeding and AI bulls as Breeding/AI bulls and for Visible for Reproduction in all herds. (see paragraph 12 or 13).
 - c. Link animals to camps and/or management groups. (see paragraph 15).
6. Check that all animals are on record and correct. (see paragraph 16).

3. General – Animal Identification and Numbering:

Individual identification:

Individual identification of animals is, of course, the basis of record keeping. The most common method of identification is a plastic ear tag with the animal's unique number on it. Electronic identification by means for a microchip implant is a method commonly used by game breeders.

We strongly recommend that at least two ways of individual identification be used, for the simple reason that if one is lost (e.g. plastic ear tag torn or broken off), the animal can still be identified and the historical records are therefore not going to get lost. The individual identification method is not prescribed, but one of the following options is recommended:

- Electronic ID [microchip implant] (EID) + ear tag (VID) **or**
- Ear tag + steel ear tag **or**
- Electronic ID (EID) + ear notches – especially for species like buffalo and rhinos where plastic ear tags often get lost.

Calves should, if possible, depending on the particular species, be marked as soon as practicable after birth with at least one of the above methods, usually a plastic ear tag or ear notches and/or electronic ID. When calves are weaned, they should also be marked with a second method, e.g. electronic ID.

ID Number format:

The number format is not prescribed, but we recommend that the visual ID number be made up of the Year of birth (e.g. 19 for 2019) + Sequence Number (e.g. 1 for the first calf born in the year). In the above example, the animal's ID number would be 191. In BenguFarm it will be 1901 or 19001 or 190001, depending on how many calves are expected per year.

It is very important that there are **no duplicate numbers** in BenguFarm GAME as this causes many problems. Preferably, different ID numbers should be used for animals of different species (herds) on the same database, for example buffalo animals' sequence numbers 1 - 499 and sable animals' sequence numbers 501 - 999. Another option is to put in BenguFarm the species code at the front of the number, e.g. BUF191 for the first buffalo calf of 2019 and SBL191 for the first sable of 2019 to make the ID number unique across species. **Please note:** Use two (not just one) characters for the year of birth (e.g. 19 instead of 9 for animals born in 2019) to prevent duplicate numbers being created in the BenguFarm database over the long term. **See paragraph 8, ID Methods and Numbering, for setting up default methods and formats in BenguFarm.**

Alternative numbers:

The ID Number (visual) is the primary number of an animal in the program. Animals are listed and sorted by this number. However, BenguFarm provides for the recording of other numbers, where applicable, namely: Electronic/Microchip ID Number (EID), DNA Number, Genomic number (stud only), Animal Name, Computer Number (not applicable to game), Animal ID [official] (not applicable to game), Biobank Number (not applicable to game) and Lot Number. **To search for an animal on another number**, go to Animals > Search Animal.

4. Install BenguFarm:

BenguFarm is the umbrella software product with various modules, namely GAME, BEEF, SHEEP & GOATS and PIGS and GENETICS. Separate databases can be set up in BenguFarm for the various modules. The module used for the management of game is called BenguFarm GAME. You will therefore install BenguFarm, and then a game database is registered for the GAME module.

For a video with step-by-step instructions to download and install BenguFarm, visit the BenguFarm Support Channel on YouTube at: [youtube.com/@BenguFarm](https://www.youtube.com/@BenguFarm) > BenguFarm Installation - **Step 1: Download and Install**. Remember to save the BenguFarm Support Channel link as a favourite for future use for assistance with other aspects/features in Benguram.

To download and install the programme from the Internet:

- Go to www.bengufarm.co.za > Downloads > Software. Follow the instructions on the page to download and install the following software:
 - Crystal Reports Run-Time for .NET Framework (32-bit) [117MB] (third party software used for creating reports); and
 - BenguFarm Installer 3 November 2026 [84MB]. **Note:** If you get a security warning, click "More Info" > "Run" or "Allow" or "Run Anyway".
- Go to Downloads > Updates and download the latest version [10MB] of the BenguFarm software and install it. If Windows gives you a "Discard" or "Keep" option when starting to download the update file, select "Keep" and then "Keep Anyway". If your computer still does not allow you to download the file, de-activate your computer's anti-virus temporarily and try again. Once the download has completed, the self-extracting zip file must be run. Select "Run" from the "Download Complete" dialog. (The download complete dialog is displayed by the web browser once the file download has completed). Windows may give a security warning and ask the user whether the file must be run or not. Select "More Info" and/or "Run" / "Run Anyway" to run the update file.

5. Running BenguFarm for the first time:

For a video with step-by-step instructions to do the initial settings, visit the BenguFarm Support Channel on YouTube at: [youtube.com/@BenguFarm](https://www.youtube.com/@BenguFarm) > BenguFarm Installation - **Step 2: Enter Initial Settings**.

Double click on the BenguFarm icon located on the Windows desktop. A message "Do you want to allow this app (BenguFarm)..." will be displayed. Click "Yes". BenguFarm will now open and the "Welcome to BenguFarm" window will be displayed. On this window you should enter the following:

- **Language:** Choose the language in which you would like to use the programme. (You can change it at any time if necessary).
- **Registered Username:** This will appear on the BenguFarm welcome email. (E.g. Game Farmer Farming CC). Please make sure that the name is correct, because you cannot change it yourself at a later stage. (This name will be displayed on the bottom of all BenguFarm GAME reports).
- **Primary Herd:** Check "Primary Herd (e.g. Stud herd) what I want to run on BenguFarm"
 - At **Module**, select "Game".
 - At **Breed/Species**, select the applicable species.
 - At **Herd Name/Description**, complete the name of the species, or your primary species if you have more than one species, (e.g. Sable).
 - **Basic (non-stud) Program Layout:** This option must be marked.
- **Secondary herd:** Mark "Secondary herd (e.g. Buffalo) that I want to manage on BenguFarm" only if a second species is applicable.
 - At **Module**, select "Game".
 - At **Breed/Species**, select the applicable species.
 - At **Herd Name/Description**, complete the name of the applicable species (e.g. Buffalo).
- Select the option **Create the Respective Herds in the same Database**. If you are unsure about this option, read the instructions in paragraph 9 for the creation of additional herds (species) before you decide on the option "Create the RespectiveHerds in the same Database".
- Click on "Accept these Settings".

6. Register BenguFarm GAME:

For a video with step-by-step instructions to register BenguFarm, visit the BenguFarm Support Channel on YouTube at: [youtube.com/@BenguFarm](https://www.youtube.com/@BenguFarm) > BenguFarm Installation - **Step 3: Register or Renew Registration**.

A window will now appear with a warning that the programme has not been registered and that you can open the programme for only five days without registering. If you want to register immediately, click on "Register/Renew Registration Now". On the Registration window at "BenguFarm Module (Species)", choose "Game". **To register**, please contact Philna Moulich at 051 4100 910 or send her an e-mail to registration@benguelasoft.co.za. Supply her with the following info:

- Your registered BenguFarm GAME username (as completed on the order form) and account number (as on the Welcome e-mail you received from BenguelaSoft),
- The Computer Identification Code (code on the top left of the registration window),
- The number of herds or species for which you want to register the programme.

At Account Number, enter your BenguFarm account number (BPU....), at Access the access code that Philna will give you and then click Change Client Account Number. At Registration Code, enter the registration code and at Access the access code that Philna will give you and then click Register/Reregister.

For after-hours registration, please contact Mr. Leslie Bergh (082 801 2026) or Mr. Johan de Jager (083 305 1042) and supply the above information.

BenguFarm agents use **Teamviewer software for remote (Internet) support**. Teamviewer can, if installed, be opened from BenguFarm on the main screen by going to Help > Teamviewer Remote Support. If not installed, Teamviewer can be downloaded and installed at www.bengufarm.co.za > Downloads > Software > Teamviewer Remote Support Software.

Please note: If you have installed BenguFarm on more than one computer, the above registration process necessary to be followed for each computer.

7. Main window and general functions:

7.1 Messages when BenguFarm opens:

- **"Do you want to allow this app (BenguFarm) from an unknown publisher..."**. This is a Windows message because it does not recognize BenguFarm program as a registered developer. Click "Yes" to continue to open BenguFarm.
- **"It is recommended that you check the data structures from time to time. Do you want to check it now?"** This function checks whether there is any missing, incorrect or corrupt data in the database. The process is relatively quick - it usually takes no more than about 10 seconds. Click "Yes" to execute the function.
- **"The animal numbers for this month have not been saved yet. Do you want to calculate and save the animal numbers now?"** This message will appear according to the settings at Settings > Herds > Reminders > "Reminder Interval to Calculate Animal Numbers". The default option is Monthly. Click "Yes" to save the numbers. To create a report of saved animal numbers, go to Reports > Animal Lists and Numbers > Animal Numbers and Values. At the top right of the screen at Load Saved Numbers select the relevant date and click Load.
- **"It is [#] days since the summary information has been calculated. Do you wish to recalculate the summary information now?"** This function recalculates the summary data for all animals in the relevant herd in BenguFarm. Please note that in a large database this function can take several minutes to execute. This message will appear according to the settings at Settings > Herds > Reminders > "Remind to calculate summary information". The default option is to remind every 30 days. Click "Yes" to recalculate the summary information.
- **"A backup of this database was last made on [date]. Do you want to make a backup now?"** This message will appear when BenguFarm is closed according to the settings at Settings > Herds > Reminders > "Remind to make Backup of Database". The default option is to remind every 7 days. Click "Yes" to open the Backup and Restore screen.
- **"It seems that the animals' breeding values are out of date. Do you wish to import breeding values now?"** This message only applies to stud herds and will appear according to the settings at Settings > Herds > Reminders > "Remind to Download latest Breeding Values". The default option is to remind every month. Click "Yes" to import the latest breeding values.

7.2 Main window:

- **To change the language** in BenguFarm, go to Options > Change Language.
- **Access to all input windows, reports and data send/Import functions** are obtained on the main window by selecting the window from the menu at the top of the window or by clicking on the corresponding shortcuts.
- **The largest part of the main window is used to view animals' data. There are two options, namely the Herd Layout and the Animal Layout.**
- **To switch between the above two main screen options**, click on the left side of the screen on Herd Layout or Animal Layout.
 - **General:**
 - The animals that appear in the **list of animals** on the main window are controlled by switching the **general filters** Active / Non-active / Male / Female on or off. The Group Filter (to the right of the Female filter) or the Choose Animals window (the  button) can be used as additional filter.
 - **Active animals** are animals that are alive in the particular herd. **Non-active animals** are animals that are not alive in the particular herd, for example animals that were sold or died and animals that have never been in the herd but found in the pedigree or progeny of animals that are in the herd.
 - Animal numbers are **displayed by sex on different background colours**:
 - Female – Pink
 - Male – Blue
 - Sex Uncertain – Red
 - Castrated – Orange
 - **To view the new/updated data**, click on the Refresh Screen icon. **Please note:** If animals are moved to or from a group while that group has been selected with the group filter, the animals in the relevant group will only be updated after the group filter has been switched off (No Group Filter) and the relevant group has been filtered again.

- **Herd Layout:** This layout is used to display certain important data of a group of animals (typically all the animals in the herd) in Table Layout. For step-by-step help, go in the main menu to Help > Help with Main Window > Herd Layout.
 - **To view the new/updated data,** click on Refresh Screen.
 - **To fully display data in columns,** click on Auto Width.
 - **To select which data should be displayed,** click Display Options at the bottom of the screen and select the relevant sections or fields.
 - **To highlight certain animal data** (e.g. cows with an average inter-calving period of more than 400 days) as well as setting up rank values for the selected criteria, click on Setup Herd Layout Highlighting and Rank Value (icon with small squares with different colours). Use the **Help** function if necessary. **Please note:** If Activate Highlighting and Rank Value is checked, the columns ID No, Sire and Dam are automatically highlighted green, blue and pink respectively. Under the Pregnancy section, the Expected Calving Date will automatically be highlighted in red if it is already more than two weeks past that date. **For a video with step-by-step instructions,** visit the BenguFarm Support Channel on YouTube at: youtube.com/@BenguFarm > Herd Layout: **Highlighting – Highlight Values and Rank Values.**
 - **To display columns for Vaccinations, Dosings & Supplements, Disease Tests** (e.g. Foot-and-mouth disease), **Traits** (e.g. condition score, general appearance score), **Procedures** (e.g. castrate, tail docking) **and/or Additional Weights,** click on the Set Up My Columns to Display (icon at the top). **For a video with step-by-step instructions,** visit the BenguFarm Support Channel on YouTube at: youtube.com/@BenguFarm > Herd Layout: Display My Columns – **Adding User Defined Columns.**
 - To set up a new layout, click on Add Layout (top right) and in the Name of Layout (top left), give it a name (e.g. Vaccinations, Dosages and Supplements) and click Save.
 - To add a column to this layout, click Add Column (bottom left). At Type of Data, select the relevant type of data (e.g. Vaccinations/ Dosing/Supplements), at Item, select the relevant data (e.g. RB51 Vaccine), at Display, select e.g. Date and by Filter, select e.g. Last. Click Save.
 - On the main screen's Herd Layout under Display Options check the box next to Display My Columns and the relevant layout.
 - After the above setup, My Columns will display on the Herd Layout just to the right of the Weight Indices section.
 - **To save the column selections and highlighting options as default for the particular herd,** click on Save Options as Herd Default under the heading Save/Load Layout. The saved options will automatically load the next time the herd is opened.
 - **To save a layout for re-use,** give it a name at Save Layout As under the heading Save/Load Layout and click on the Save icon.
 - **To load a saved layout,** select the particular layout at Load Saved Layout and click on the Load icon.
 - **Please note:** Management groups column: If an animal is linked to more than one management group, only one of the groups will be displayed.
 - **To create a report of the data displayed in the Herd Layout,** click on Display Report. **Please note:** All columns and all animals will be included in the report. Click on Display Options to select and deselect columns you wish not to include in the report. Use the filters at the top of the window to change the selection of animals which should be included in the report.
 - **To view a specific animal's (or sire or dam) data in the Animal Layout main screen layout,** click on the relevant animal's ID number. To return to the relevant animal in the Herd Layout, click on the Herd Layout link.
 - **To group records,** click on the column heading and hold the mouse button. Now move the mouse to the open section at the top of the report where there is written "Drag a column

header here to group by that column" and release the mouse button. The column name will now be displayed in this open section. Records can be grouped on more than one column values. To remove the group, right click on the column heading and select "UnGroup". **For a video with step-by-step instructions to group, sort, filter and select**, visit the BenguFarm Support Channel on YouTube at: youtube.com/@BenguFarm > Herd Layout: **Define Views, Sort, Filter, Group & Select**.

- **To sort records**, click on the appropriate column heading. To sort in the reverse order, click a second time on the column heading. To sort by multiple columns at once, hold the SHIFT key on the keyboard and click on the column headings.
 - **To filter records**, click on the right of a column heading on the filter button. A list of all the values that appear in that column will be displayed. To display only records that have a specific value, click on that value. You can also click on "(Custom)". A screen will open where, for example, you can select to display all records with a value greater than a certain value. Note that more than one column can be filtered at a time. To remove a specific column's filter, click "(All)" at the filter options of that column. To remove all column filters, click on the X at the bottom left of the main window.
 - **To temporarily move a column to another position in the table**, click on the column's heading and drag it to where it should be placed and drop it. When the relevant screen is closed and reopened, such a column will be displayed again in its original location.
 - **To temporarily remove a column from a screen**, click on that column's heading and drag it until it displays a large cross and drop it. When the relevant screen is closed and reopened, such a column will be displayed again.
 - **To record certain data** (e.g. Edit Animals (Table Layout) or Sales, Deaths and Culls) **for a group of animals**, mark the animals in the "S" column and select the appropriate recording screen from the top menu or click on the corresponding icon.
 - **To link or move animals to a camp or group**, mark the animals in the "S" column and click Link Animals to Group.
 - **To display animals in the My Reports screen**, mark the animals in the "S" column and click Display in My Reports.
 - **To copy the data to the computer's "Clipboard"**, click Copy to Clipboard.
- **Animal Layout:** This option consists of display (view) windows which are used to display the data of a single animal. There are various display windows available where data from the animal selected at the top left of the main window (obviously only when animals are already in the BenguFarm database), is displayed. There are for example display windows for general data, birth data, reproduction and progeny averages, pedigrees, photos, etc. For step-by-step help, go in the main menu to **Help** > Help with Main Window > Animal Layout.
- The display windows are divided into four groups or sub-windows. You can select to view one display window from each group of sub-windows at a time. Simply click on the tab of the applicable display window at the bottom of the group of display windows.
 - **To hide display windows which are not used**, click on the "Display" menu and under the heading Main Window View Screens remove the tick mark next to the appropriate display window. **For a video with step-by-step instructions to switch display windows on or off**, visit the BenguFarm Support Channel on YouTube at: youtube.com/@BenguFarm > Main Screen - Herd Layout – **Customise Data to be Displayed**.
 - **To create a report of the data being displayed on a display window**, click on the printer icon in the right-hand top corner of the relevant display window. For more display settings, see paragraph 10.
 - **To select an animal** (which is already in the BenguFarm database) to display on the main window, click on the pink or blue box at the top left of the main window or press Ctrl+Z on the keyboard. The animal can be chosen from the list or the ID No can simply be typed. The arrows left and right are used to move to the previous and next animals in the list.
 - **To enlarge or reduce sub-screens**, move the cursor on the brown line between the sub-screens and drag and drop to the desired size.
- **Tip: To select the Herd Layout** (instead of the Animal Layout) **as the default layout for the main window**, go to Display and click the Use Herd Layout as Default Main Window Layout option.
- **For further assistance with the use of the main screen**, go to Help > How to Use this Window.
 - **Tip: If an animal(s) that you expect to be in the animal list are not found**, check the following:

- If you have more than one herd on BenguFarm, make sure you are looking for the animal in the right herd. Also look for the animal in the other herds. Also check in the ALL herd whether the animal is not mistakenly in the ALL herd (i.e. not in a specific herd).
- If you are looking for the animal on the main screen's Herd Layout, make sure the animals are sorted by ID number. If not, click on the ID No's column heading to sort by ID No.
- If you are looking for the animal on the main screen's Herd Layout and the animal you are looking for has just been added, make sure you have refreshed the main screen.
- Are the correct general animal filters selected? If only active animals are listed, check whether the animal is perhaps non-active.
- Check whether a group filter has not been selected that excludes the animal.
- If a group filter on the main screen's Herd Layout has already been selected and an animal(s) has been added to that group, the group filter must be de-selected and re-selected before the animal will be displayed in that group.
- Check whether a column filter(s) has not been selected on the main screen's Herd Layout that excludes the animal. Look at the bottom left of the screen for active column filters.
- Is the number format of the animal concerned correct? (e.g. A210001, A 210001, A21001).

7.3 Choose Animals window:

- The **Choose Animals screen** is used everywhere in BenguFarm to choose animals for recording data or to include in a report. The user can choose the animals by hand (right hand side of screen) or choose the animals from a group(s) and/or filter(s) (left hand side of screen). If animals are selected with the Choose Animals by Hand section, the quick select buttons at the bottom left of the screen can be used: Check mark = Select all animals, Cross = Select no animals, Horizontal lightning bolt = Select all records of first to last selected records, Arrows pointing left and right = Invert selection. These quick select buttons appear anywhere in the program where animals can be manually selected. The Choose Animals screen is opened when the user clicks on the  button in a recording or report window. Use the **Help** function if necessary.

7.4 General Functions – All windows:

- **To open a window, all other windows must be closed.** If a window is minimized, another window cannot be opened.
- **BenguFarm can only be closed if all the windows are closed.**
- **To quickly find an animal on the main screen or other drop-down list,** open the list and enter the animal's ID number. The same goes for finding an item in any type of drop-down list.
- **Sex indication on screens:** Column heading is Male. Male animals have a tick mark, females not.
- **The general animal filters** (Active / Non-active / Male / Female) are displayed on all screens where animals can be selected at the top of the relevant screen as four squares. The description of each filter can be displayed by moving the pointer over the box.
- On all recording windows **fields compulsory/important to complete are on a yellow background.** Fields with a white background is optional to complete.
- **To move from one field/column to the next** where data need to be entered, use the "Tab" key or die "→" key.
- **To go to the next or the previous line** where data need to be entered, use the "↓" and the "↑" keys.
- **Numeric fields (e.g. weight, price) MUST have a value (0 or other).**
- **To select a date using the calendar,** firstly select the year, then the month, then click on the day.
- **To edit or delete existing data,** see paragraph 17.
- **To sort or filter records on a window or to move a column to another position in the table or to temporarily remove a column from a screen,** see the instructions above at Main Window > Herd Layout.
- **The full description of a column heading** can be displayed by moving the pointer over the column heading.
- **To choose animals for multi editing or deletion,** select the S (Select) column and change the relevant data at the top of the screen in the Multi Edit / Add New part of the screen.
- It is recommended that costs and prices be recorded *without* VAT.
- **To create a new record at Settings,** click on the "+" at the bottom right of the window. To delete a record, click on the "-" at the bottom right of the window.
- A **step-by-step Help function** is available on most windows at the top right of the screen. Please use it – you will be surprised how easy it works.

7.5 Reports and Recording Lists:

- All reports can be created through the Reports menu item.
- Reports with "(**recording list**)" behind the report name are reports with some blank columns in the report. The purpose is to **print the relevant report (recording list) and take it to the camp to record data on it**, e.g. a Trait Lists (recording list) on which horn measurements can be recorded. This is of course only applicable if data recording is not done directly on the Mobile app. The benefits of using printed recording lists are:
 - Animals are sorted – easy to record data later in BenguFarm;
 - Easy to check if all animals are done;
 - All necessary info is printed on the recording list;
 - Does not waste time writing animal ID numbers;
 - Errors with animal identification can easily be detected.
- The applicable reports are listed under the relevant paragraph in this manual. See for example the Pregnancy Tests paragraph where the reports applicable to pregnancy tests are listed.
- Certain reports (e.g. Vaccinations, Dosings, Dips and Supplements and Disease Tests) have a "Display Worksheet" option. The purpose of this option is to be able to select animals on this screen to link to a camp or group.
- When a report is created (Display Report), there is always options to print or to the export the report. With the Export option a **report can be saved in various formats, e.g. pdf or Excel** or the report can be e-mailed directly from BenguFarm to a contact. **Please note:** Direct mail sending, for certain technical reasons, does not always work. If you have a problem with this option, contact your BenguFarm agent for help setting up the SMTP Direct Email Option [Settings > Herds > E-mail > Use SMTP Direct Email].
- With the **My Reports** feature (Reports > My Reports > Animal Data) you can create your own customized reports. Use the Help function (top right of the screen) for step-by-step instructions.
- On the main screen's **Herd Layout**, you can use the Display Report feature to create a report of the displayed data. See the paragraph Main Screen > Herd Layout.
- To create a report containing **animals from all herds** on the relevant database (where applicable), go to the "ALL" herd [File > Change Active Herd To > ALL].

8. Settings:

Tip: To change the language in BenguFarm, go to Options > Change Language.

It is very important that the settings for each herd (species) are done *before* you start using the programme to ensure that the programme functions correct and optimal.

For a video with step-by-step instructions to do the initial settings, visit the BenguFarm Support Channel on YouTube at: youtube.com/@BenguFarm > **BenguFarm Installation – Step 2: Entering Initial Settings.**

8.1 Herd settings:

Go to Settings > Herds. Complete/change the information, where necessary, under the following headings on the grey area of the window. **Please note: First do the General settings, secondly the Service Providers and then the rest.** For most settings, default values or options have been selected. Check these default settings and only change if necessary for your specific needs.

Please note: Fields with a yellow background is compulsory/important to complete. Fields with a white background is optional to complete.

- **General:**
 - **Name** (required): E.g. Sable or Blue Wildebeest (not Golden Wildebeest).
 - **Description** (optional): E.g. Sable Herd.
 - **Owner** (optional): E.g. James Brown.
 - **Farm Name** (optional): E.g. Sweet Water.
 - **GLN Number** (optional): RMIS traceability default herd Global Location Number.
 - **BenguFarm Module** (required): Game.
 - **Animal Species (REQUIRED and VERY IMPORTANT):** E.g. SBL – Sable. This setting determines certain species-specific default settings such as pregnancy period and horn measurements. If you change this, close the programme, open it again and go to File > Support > Recalculate Summary Data for the change to take effect.

- **Herd Type** (required): Select Commercial.
- **Brand Mark**: Not applicable to the GAME module. Leave the field blank.
- **HDM**: Not applicable to the GAME module. Leave the field blank.
- **Prefix**: Not applicable to the GAME module. Leave the field blank.
- **Society Member No**: Not applicable to the GAME module. Leave the field blank.
- **WRSA Member No** (only applicable to WRSA members): E.g. 12345.
- **Invoices Made Out To** (optional): Complete the name of the person or business to which the invoices should be made out to.
- **VAT No** (optional): Complete the VAT number.
- **Postal Address** (optional): Complete the postal address.
- **Postal Code** (optional): E.g. 2500.
- **Land Code** (optional): E.g. ZAR.
- **Contact Person** (optional): Click on the shortcut icon on the far right (Auto create herd contact from herd details). Now click on the shortcut on the right (which looks like a red notebook) to open the Contacts window and fill in the missing information, specifically the name & surname, cell phone number and email address. Save. Now select the contact from the contact list. **Please note**: The contact details completed here (name and surname, cell number and email address) will be printed at the top of all reports.
- **Breeder, Owner and Keeper** (optional): Select the contact you set up above, e.g. Long Horn Game Breeders.
- **Service Providers**: Not applicable to the GAME module. Leave this screen as is.
- **ID Methods and Numbering**: (Refer paragraph 3 for general information on ID Methods and Numbering of animals)
 - **Default ID Format**: The default ID format is used to determine the format of the Animal ID No (visual) in BenguFarm GAME. The HHHH indicates there is provision for maximum 4 characters for the Herd Designation Mark (if applicable), the YY indicates there is provision for maximum 2 characters for the year of birth and the NNNN indicates there is provision for maximum 4 characters of the sequence number. E.g. if the herd designation mark is BUF (for Buffalo), the year of birth is 2022 and the sequence number 123, the ID No will be created as BUF220123. Game breeders usually use only the year of birth and sequence number to identify animals. In this case, the default ID format can be set as YYNNNN or YY-NNNN.
 - **Default Main ID Method (Permanent ID)**: For game the default permanent ID method is usually an Electronic ID.
 - **Default Sub ID Method (Visual ID)**: For game the default visual ID method is usually an Ear tag.
 - **Separate Sequence Numbers for Heifers and Bulls**: Check this option only if (for this herd) one serial number range for heifer and bull calves is *not* used. At Sequence Number Method the appropriate option should be selected for Male and Female. If continuous series sequence numbers (in this herd) are used for heifer and bull calves (e.g. 1-100 for heifer calves and 101-200 for bull calves OR 1-100 for heifer calves and 1-100 for bull calves), tick Continuous Sequence Numbers at both sexes.
 - **Apply Sequencing Settings of First Herd to All Herds**: Select this option if you have two (or more) herds on the same database and you use one sequence number range for both herds. BenguFarm will then allocate the next available sequence number irrespective of the herd when new calves are recorded on the Calving screen.
 - **Auto Remove EID when Animal is Sold or Died**: This option should only be changed to "No" if EIDs should NOT be removed from animals sold or dead, e.g. for traceability purposes. It cannot be changed by the user. Contact your BenguFarm agent to help with this.
 - **Create ID No (Visual) from EID (Electronic ID Number) where no ID No is specified**: This option should only be chosen if *only* microchip/electronic identification is used and BenguFarm GAME should *automatically* create visual Indris from the microchip/electronic identification numbers that are imported into BenguFarm from an electronic identification reader or -scale.
- **Mating, Pregnancy and Calving**:
 - **Current Calving Season**: Ignore - see Calving Season settings below.
 - See Appendix C on how **Minimum Age of Heifers at First Mating**, **Av. Period from Calving to Mated Again** and **Normal Pregnancy Period** are used in the calculation of Expected Calving Date.
 - **Synchronisation** (if applicable): Complete the # Days from Insert to First Injection; # Days from Insert to Second Injection; # Days from Insert to Remove and # Days from Remove to AI / Lapa.
 - **Other fields**: Check the default values and change only where necessary for the specific species.

- **Performance Testing:**
 - Ignore – not applicable to game.
- **E-mail:**
 - **Use Windows Configured E-mail Program:** Check this option if you use any e-mail program other than Microsoft Outlook.
 - **Use Microsoft Outlook as E-mail Program:** Check this option if you use Microsoft Outlook.
 - **Use SMTP Direct Mail:** Check this option only if your BenguFarm GAME agent recommended it when you have problems sending e-mails from BenguFarm with your regular e-mail program.
 - **Send E-mail Direct:** Do not check this option.
 - **Display E-mail Success:** This option must be checked.
- **Default Folders for Files:**
 - During the installation of BenguFarm, a folder "BenguFarm" is automatically created on the computer's local disk (C:\BenguFarm\). In this folder is a subfolder "Game" with three sub-folders, namely "Imports", "Exports" and "Backups" are created with sub-folders for your herd(s) in each of them. In BenguFarm GAME these three sub-folders are then automatically set as the default folders where BenguFarm GAME data can be saved. **Please note:** The default place for saving backup files (C:\BenguFarm\Game\Backups\[Herd]) is NOT a safe place, since the backup will be lost if the computer is stolen or get damaged. **It is VERY IMPORTANT to save backups in a SAFE PLACE**, e.g. a cloud-based place like Dropbox, GoogleDrive or OneDrive and/or on an external hard drive or memory stick. Click on the button with the three dots to select a save place.
 - **Default Folder where Photos will be Saved In:** Do NOT change the default directory - it is correct.
- Map Network Drive at Start-up: **If you want to put the BenguFarm database on a network**, please contact Mr. Leslie Bergh at leslie@benguelasoft.co.za or 082 801 2026 for instructions to set it up.
- **Reminders:**
 - Check the default values and change only if necessary.
- **Body Measurements:**
 - By default, all horn measurements in BenguFarm are recorded in *decimals* (e.g. 40.375). On the main screen and on all reports the results are displayed in *fractions* (e.g. 403/8). If you want to display the measurements in decimals instead of fractions, remove the check at Display Horn Measurements with Fractions and click Save.
 - Cows' Frame Size: Ignore – not applicable in game.
- **Scoring:**
 - Ignore – the default is correct.
- **Other:**
 - Check the default values and change only if necessary.
 - **Default Group Category:** Select the group category that will be used most often.
 - **Allow Sales, Deaths and Culls Records for Animal in Each Herd:** Check this option only if you have more than one herd (on the same database) and you want to record more than one sales record per animal.
 - **Allow Data Recording in "ALL" Herd:** Check this option if you have more than one herd (on the same database) to allow certain data (pregnancy tests, vaccinations, illnesses and treatments, camp and group movements, purchases, procedures, etc.) to be recorded in the ALL herd.
 - **Auto Warn if updated BenguFarm CLOUD Data is Available:** If this setting is checked, BenguFarm will automatically check for new data available in the CLOUD when going into a herd and every 10 minutes thereafter. This function only applies to the database that is currently being worked on. If there is a change to data, it is highlighted and the user has the option to synchronize immediately or not.

8.2 Groups – Calving seasons, camps and management groups:

Animal numbers categories:

BenguFarm *automatically* link animals to an Animal Numbers category (e.g., Heifer Calves, Young Heifers, Breedable Heifers, Young Cows, Mature Cows, Old Cows) based on the animal's age, sex and (for female animals) whether progeny is on record (cow) or not (heifer). For example, when a heifer's first calving is recorded in BenguFarm, its category will *automatically* change from Breedable Heifers to Young Cows. Please note that older cows without progeny on BenguFarm, regardless of age, are categorised as Breedable Heifers, unless the field "First Calf not on Record" has been marked, in which case they will be categorised as Young Cows or Mature Cows or Old Cows, depending on their age – see paragraph 12 or 13. The animal numbers categories are displayed on, among other places, on the main screen > Herd Layout > General > Category.

To see the criteria for the various animal numbers categories, go to Reports > Animal Lists and Numbers > Animal Numbers and Values. At the top left of the screen at Select Calculation Method, click the setup shortcut button (red notebook). The Default Cattle Numbers method cannot be changed. If the Default Cattle Numbers method does not meet your needs, you can set up your own method by clicking New or Copy. We recommend selecting the Copy option, only change it as needed and then save it with a name. Please discuss your own criteria with your BenguFarm GAME agent to ensure that the criteria are set up so that certain animals are not excluded from the count. **Tip:** To record average tax and market values for the different categories of animals, complete the Market Value and Tax Value columns and Save. To select a different calculation method as the default method for the particular herd, go to Settings > Herds > Reminders > Default Animal Numbers Calculation Method.

To create an animal numbers and values report which will show the number of animals in the herd per category, go to Reports > Animal Lists and Numbers > Animal Numbers and Values. There are two options for the report: The Category View lists the number of animals per category with values (if set up) and livestock units (LSU). The Camp View lists the number of animals per category per camp. **Note:** If the animals in a camp's # LSU are more than the set # LSU for the camp, the number is highlighted in red.

Own Set Up Groups:

In BenguFarm GAME different type of groups can be set up and animals linked to it. The different types of groups are called Categories, e.g. Calving Seasons, Camps, Management Groups, etc. Under each category, the relevant groups are set up. Under Calving Seasons, for example, a calving season "Spring 2019" can be set up to link all calves born in that season to it.

Groups are used to select a group of animals easily, quickly and accurately for recording data (e.g. to record results of pregnancy tests for all animals in Camp 1) or for inclusion in a report (e.g. to create a weighing list for all calves born in the Spring 2019 season), to have an inventory to check if all animals are in a camp or group, to know in which camp or group to look for an animal, to record feed and/or lick usage per camp and to calculate pasture utilization per camp.

Please note:

- Animals can *not* be linked to a category; they should be linked to groups of the applicable category.
- Groups in different categories are independent of each other. An animal can, for example, be linked to a certain calving season, camp and management group.

Calving Season Groups:

- Calving seasons are used to indicate in which year and season the animal was born. Calving seasons are also specified when entering matings (if applicable). **Mating and calving seasons are normally NOT used by game breeders. If you are not using it, you can ignore this setting.**
- If you do make use of breeding and calving seasons, go to Settings > Calving Seasons and click on the "+" (right bottom corner of the window) to create a new season record. It is recommended that you use the year and first letter of the season for the calving season code, e.g.:

		Calving Season		Mating Season		Calvings	
Herd	In Use	Code	Name	Begin Mating	End Mating	Start	End
ALL	√	2017S	Calves born 2017 Spring	15 Nov 2016	15 Feb 2017	calculated	calculated

After the new calving season has been saved, select the **Current Calving Season** in the yellow area of the window and click on Save.

Camp Groups:

- Camps are used to link animals in BenguFarm to keep record of which animals are or were in which camps on a specific date. It can then be used for stock take. It is also used to calculate the pasture utilization per camp and to record feed and/or lick usage per camp.

- **To set up a new camp**, go to Settings > Camps and click on the “+” (right bottom corner of the window), for example:

Herd	In Use	Device	Code	Name	Scale ID	Type of grazing	Size (ha)	Carrying Capacity (ha/LSU)	Total LSUs
ALL	✓	✓	FC1	Fairview Camp 1	n.a.	Sour bushveld	25	5	5.0
ALL	✓	✓	FC2	Fairview Camp 2	n.a.	Sour bushveld	32	6	5.3

Please note:

- The setup of camp sizes and carrying capacity per camp is optional, but it is important to get the full benefit of the Pasture Utilisation per Camp report (see the paragraph below for more info).
- The category Camps on Farm is set up to allow an animal to be in only ONE camp at a time. If an animal is moved from one camp to another, it is automatically removed from the previous camp.
- Also create a **Boma** “camp” and, if applicable, also an **Open Farm** “camp” to enable you to move animals to the boma or the open farm.
- Do *not* give camps the name of the species that runs in the particular camp, because it creates confusion when a species is moved to a different species’ camp. Give ideally camp numbers. The species running in a camp may be added in brackets after the camp name, e.g. Camp 1 (Buffalo).

Management Groups:

- Management groups are used to link animals that are managed together, regardless of in which camp(s) the group is to a group in BenguFarm, e.g. Young Heifers, Pregnant Heifers, First Calf Cows, Mature Cows. **Please note:** The actual management groups on the farm dictate how the management groups in BenguFarm should be set up, not the other way around.
- **To set up management groups**, go to Settings > Groups and Camps. At the top left at Select Category, select Management Groups. **Please note:** We recommend that management groups be set up that an animal can only be in one management group. To do this, select the option **Only in One Group**. At Select Group/Camp, click on Add/Edit/Remove Group/Camp. On the small window, click on the “+” to add a new group. Check the **Calf** box if you want new calves recorded on the Calving window to be linked automatically to this group. Check the **Device** box if you want this group to be available on your Mobile app, EID reader and Tru-Test XR5000 scale, where applicable.
- **Tip:** At Settings > Herds > Other > Default Group Category, the most often used groups category can be selected.

Cull and Sale Groups:

- Cull and Sale Groups are used to link animals to be culled or sold in BenguFarm, for example cows for possible culling, weaners to sell and production sale animals. These groups allow you to choose animals to be culled or sold, irrespective in which camps or management groups these animals are in. Animals linked to a cull or sale group therefore remain in their respective camp or management group until such time as they are sold.
- The default setting of the category Cull and Sale Groups is that an animal can be in more than one cull or sale group at a time. To change it so that an animal can only be in one cull or sale group at a time, go to Settings > Groups and Camps > Select Category > Add/Edit/Delete Categories > check the Only in One Group box next to the Cull and Sale Groups > Save > Exit.

See paragraph 15 for how to link animals to a camp or group and how to move them.

Filter Groups:

A filter group is a group of animals as selected by a certain set of criteria. These criteria can be specified and saved in the My Animal Data report [See Reports > My Reports > Animal Data > Select Animals (Criteria)]. You can for example setup criteria to list all active female animals born in a certain year and that dID Not calve yet. These criteria can then be saved for later use. Animals can be selected via saved filter groups on the Choose Animals window, on the main window > Herd Layout > Group Filter as well as in the My Animal Data reports. **Please note:** It is important to note that a filter group is thus not a specific selection of animals stored somewhere in the database. The animals in the group are determined by the stored criteria and the applicable field values of the animals in the herd at the point in time when the filter group is selected.

8.3 Traits per Species:

To change the traits normally recorded for a specific species, the order in which the traits are listed and the unit of measurement (inches or cm), go to Settings > Traits per Species. These settings will find application in the Darting Data > Horn & Other Measurements window and the Production > Horn & Other Measurements window. **Please note:** The selected list will only be displayed if the relevant animal's species is correctly recorded.

8.4 Contacts:

To create Contacts for people or businesses that will be used several places in the program (e.g. Owner, Manager, Inseminator, Buyers, Veterinarians, Consultants, Inspectors, etc.), go to Settings > Contacts, click on the "+" (lower right corner of the window) to create a new contact record. **Please note:** The Business field (person or business name) is the field that will be displayed in selection lists and is the only compulsory field to complete.

8.5 Other Settings:

All the other lists have default items already included in the particular list. You cannot edit or delete these default items but, where necessary, you can add additional items by clicking on the "+" at the bottom right of the window. The Medicines list is the one list that will need to be extended with your own list of medicines. **Tip:** In certain settings (e.g. Camps; Vaccines, Dosings & Supplements; Medicines, Diseases, Injuries & Parasites, Sales, Deaths & Culls) there is an "In Use" column. Items marked with In Use are displayed in the relevant menu at the top of the list and the rest below to make it easier to select an item. Some items also have a "Device" column. Items not marked with Device are hidden in the relevant drop-down list on the Mobile app and on the EID reader so that the list is shorter.

9. Create additional herds (species) and navigate between herds:

- BenguFarm GAME makes provision for more than one herd (e.g. different species) to be created in the programme without additional costs, provided of course that all the animals are the property of one owner.
- **A separate herd must be created for each species.** Additional herds (species) can either be created on the same database or on separate databases.
 - If animals are shared between herds (e.g. bulls used in two herds) and/or if animals are moved from time to time between herds (e.g. two separate sable herds), we recommend that the herds are created on the *same* database. Creating a second herd on the same database also has the advantage that certain settings (e.g. Camps and Contacts) do not need to be done separately for each herd and that it is not necessary to make a separate backup of each herd. Provided that the option Allow Data Recording in "ALL" Herd is checked at Settings > Herds > Other, most data recording, where applicable, can be done in the ALL herd. It also has the advantage that, through the "ALL" herd option, reports and recording lists can be created that include all animals, regardless of herd.
 - The only instance where we would recommend that you create additional herds on *separate* databases is if the different herds' record keeping in BenguFarm is going to be done by different people, e.g. the manager of farm A keeps the records of farm A's herd(s) on his computer and the manager of farm B keeps the records of farm B's herd(s) on his computer. This then has the advantage that each manager can work independently of the other manager(s) on BenguFarm and that a separate database backup of each farm's BenguFarm data can be made and, for example, restored on the owner's computer without overwriting the other farm's data.
 - **If in doubt on which option to choose or you need more info on the setup of herds, please consult with your BenguFarm GAME agent.**
- **To create a second herd (species) on the *same* database**, go to Settings > Herds > General and click on the "+" at the bottom of the window. Enter a name (e.g. Buffalo), select the Animal Species and do the rest of the settings for the herd. Click Save and Exit. **Please note:** Some general herd settings will be entered automatically if it was entered for the first herd (species) that was created. **It is therefore recommended that the General settings of the first herd (species) are done (see paragraph 8) before the additional herds (species) are created. Ensure the Animal Species field for each herd (species) is entered – this is very important.**
- **To create a second herd on a *separate* database**, go to Options > Databases. Click on + Add New, choose the Species (Game) and complete a name for the database (e.g. Buffalo) in the field Database Description. Click on Save and Exit.

- If the message "**Maximum number of herds / databases exceeded ...**" is displayed, please contact Philna Moulach at 051 4100 910 or send her an e-mail to registration@benguelasoft.co.za to register additional herds and/or databases.
- **To switch between herds** in BenguFarm GAME, go to File > Change Active Herd to. Click on List All and Select, select the appropriate herd from the drop-down list and click Activate.
- **Please note:** If more than one herd (species) is created on the same database, BenguFarm GAME will automatically create an **ALL "herd"**. When selecting the ALL "herd", animals from all herds on the relevant database can be seen in BenguFarm and all reports can be created with all animals on the relevant database. **If at Settings > Herds > Other the option Allow Data Recording in "ALL" Herd is checked, most data can be recorded in the ALL herd.** However, there are certain recording screens (e.g. Add Animals Wizard, Calvings, Sales, Deaths and Culls) that are not available to use in the ALL herd as they use herd-specific settings in the background.
 - If two (or more) herds (species) are created on the same data base, try **not to use the same ID numbers** for animals in the two herds, to prevent confusion with identification if working in the ALL "herd". One way to do this, is to add a code indicating the species before the number, e.g. B19001 for buffalo and S19001 for sables. If one set of numbers is used for all animals, regardless of the herd they are in, go to Settings > Herds > ID Methods and Numbering and select the Apply Sequencing Settings of First Herd to All Herds option.
- **To move animals of the same species between herds**, see paragraph 30.
- **Tip:** If there are more than one DATABASE in BenguFarm, a default database to open in can be selected by going to Options > Databases > highlight the applicable database > with the ↑ on the right move that database to the top > Save. If there are more than one HERD on the same database in BenguFarm, a default herd to open on can't be selected, BenguFarm will open in the herd in which it was in when BenguFarm was closed.

10. Display settings – Main window and other:

The purpose of the Display options is to customise BenguFarm for your specific needs by hiding certain windows and certain fields on some windows in BenguFarm GAME that is not used.

For a video with step-by-step instructions to switch display windows on or off, visit the BenguFarm Support Channel on YouTube at: youtube.com/@BenguFarm > Main Screen - Herd Layout – **Customise Data to be Displayed**.

To customise your BenguFarm GAME in this way to suit your specific needs and make it more user friendly, go to the Display menu item:

- **To select the Herd Layout** (instead of the Animal Layout) **as the default layout for the main window**, go to the Display and click the Use Herd Layout as Default Main Window Layout option.
- **To select or hide fields displayed on the Herd Layout of the main screen**, go on the Herd Layout to Display Options. To save your selection of fields as the default settings for the specific herd, click Save Settings as Herd Default. See paragraph 7.2 section Herd Layout for further display options available on the Herd Layout.
- **To hide** (or display what is currently hidden) **functions and fields that only apply to stud studs on the Main Window, Calving Window and Add & Edit Animal Window**, go to Display > Customize Fields Displayed in Main Window View Screens, click the Mark Default Commercial Field Selections option and click Save.
- **To hide** (or display what is currently hidden) **functions and reports in the menu on the Main window and/or fields on the Calving window and the Add & Edit Animal window which is not used**, go to Display > Customise Displayed Program Items. Make a tick mark in the box in the yellow area next to "Display only the marked Functions and/or Fields...". Click on the "+" next to Main Window Functions, Add & Edit Animals window and Calving window to check and, if necessary, change the functions and/or fields you want to be displayed. Click on Save. **Please note:** Functions and/or fields that are hidden this way will be applicable to all herds in the relevant database.
- **To hide** (or display what is currently hidden) **the display windows on the Animal Layout of the main window that are not used**, go to Display and below the heading Select Main Window Animal Layout View Screens uncheck the applicable display window. [Use the **Help** function if necessary]. **Please note:** Functions and/or fields that are hidden this way will only apply to the applicable herd. If it should apply to all herds in the relevant database, check the option Apply to All Herds in this Database and click Save.

- **To display the growth between measurements** (instead of from birth) **on the Horn Measurements view screen on the Animal Layout of the main screen**, go to Display and under the heading Horn Measurements Display Options, select the Show Growth Between Measurements option.
- **To hide** (or display what is currently hidden) **specific fields on certain lookup screens** (General, Birth, Last Mating, Reproduction & Progeny Averages, Performance Testing and Breeding Values) on the Animal Layout of the main window **that are not used**, go to Display > Customize Fields Displayed in Main Window View Screens. Click on the appropriate view screen (e.g. General) and uncheck the fields you do not use. Do the same for the other view screens. When done, click Save. **Please note:** Fields on view screens hidden in this way will only apply to the applicable herd. If it should apply to all herds in the relevant database, check the option Apply to All Herds in this Database and click Save.
- **To hide** (or display what is currently hidden) **specific fields on the Progeny display window that are not used**, go to Display > Customize Progeny View Screen Columns. Uncheck the applicable fields you do not use and then click on Exit. **Please note:** Fields on the Progeny display screen that are hidden this way will be applicable to all herds of all modules, where applicable. Certain fields that do not apply to a specific BenguFarm module will be automatically hidden.

Tip: To select an animal (e.g. your favourite breeding bull) to be displayed by default on the main window's Animal Layout when you open BenguFarm GAME, go to Settings > Herds > Other > Animal to Display when Opening BenguFarm GAME.

11. Step-by-step help function:

A step-by-step Help function is available on most windows. This function is designed to take the user step-by-step through the functions of each window. **We strongly recommend that you use these step-by-step Help functions until you are familiar with the applicable window.** The Help function is activated by clicking on the "**Help**" button on the applicable window. Then choose the applicable function you want to perform and follow the step-by-step instructions. Please note the flickering arrow in one of the corners of a Help window. This arrow indicates where on the window data should be entered or the function should be activated. Click on the ">>" button to go to the next step. Click the "<<" button to go back to the previous step. Click on the "X" button to close the Help window.

Click on the "Help" button on the main window for help with certain basic functions in BenguFarm GAME, namely General, Handling of Multiple Herds, Herd Layout and Animal Layout. The latest version of the BenguFarm manual can also be downloaded and opened here.

12. Import animal data from external sources: (if applicable)

- BenguFarm is now ready for animal records to be imported or manually recorded. The first choice is, of course, to import data from some electronic file(s) if such file(s) is available. If such file(s) (see below) is not available, the data must be manually recorded. See paragraph 13 for instructions for this.
- Depending on what data is available, data can be imported from one (or in cases where required more than one) of the following sources. Please contact your BenguFarm agent if you need any help with importing data.
- **Please note:** **Make sure you are in the correct herd** where the data should be imported.
- **To import data which was recorded on Excel**, see Appendix A or contact your BenguFarm GAME agent if you need help.
- **To import data from another BenguFarm GAME user: If you have bought animals from a fellow BenguFarm user**, the seller can create a BenguFarm Animal Transfer with the relevant animals' data [Data Send/Import > Send > BenguFarm Animal Transfer File] and send it to the buyer. To import this file, go to Data Send/Import > Import > Database > BenguFarm Animal Transfer File. Use the **Help** function if necessary. **Please note:**
 - Make sure you are in the correct herd (species) where the data should be imported.
 - If an animal(s) with the same ID number exists in another herd(s), ensure the option Only Search in Selected Herd is checked.
 - Below the Existing heading, check that the Status of the animals to be imported are correct and change where needed before you import the data.
- **To view the general data of an animal on the main window**, go on the Animal Layout to the General view window or go on the Herd Layout to the General, Identification and Birth sections.
- **After the animal data has been imported, the following information can be added, where available:**

- **To record purchase data** (purchased from whom, purchase date, price, etc.) of the above imported animals, see paragraph 14. Use the **Help** function if necessary.
- **To assign animals to camp groups**, see paragraph 15. Use the Help function if necessary.
- **To record horn measurements**, go to Production > Horn and Other Measurements **OR** go to Other Data > Darting Data > General.
- **To record the book and market value of individual animals**, go to Animals > Edit Animals (Table Layout). Use the Help function if necessary. **Please note:** When purchase data of animals is recorded (Movements > Purchases), the purchase price will automatically be entered as the book value of the animal, provided that the book value of the animal was not already recorded.
- **To record the average tax and market values** for various categories of animals, go to Reports > Animal Lists and Numbers > Animal Numbers and Values. Select Calculation Method at the top left of the window and click on the Add and Edit Animals Numbers Calculation Methods icon, complete the Market and Tax Value columns and Save.
- **To mark your breeding bulls as breeding bulls**, go to Animals > Add and Edit Animals (Single animal layout), highlight the applicable bull, make a tick mark in the field "Breeding/AI Bull" and click Save. Bulls marked as a breeding bull are listed separately under the "Breeding Bulls" category on the main screen's Herd Layout in the Category column as well as in the Animals Numbers and Values report. The breeding bulls will also be listed on top the list of bulls when recording matings.
- **If there are females in the herd that have already calved, i.e. which are cows, but the first calving is not on record in BenguFarm**, go to Animals > Edit Animals (Table Layout) and mark the field "First Calf not on Record". Use the **Help** function if necessary. Doing so will ensure that the relevant cows' category (refer paragraph 8.2), depending on their age, is indicated as Young Cows or Mature Cows or Old Cows instead of Breedable Heifers.

13. Create animal records manually: (if applicable)

- If the basic animal data of all animals in the herd couldn't be imported (refer paragraph 10), then it should be recorded manually. For this purpose, it is recommended to use the **Add Animals Wizard** window (Animals > Add Animals Wizard) to quickly and easily create animal records. [The Add and Edit Animals window (Single Animal Layout) screen can also be used, but the Add Animals Wizard is the easiest way to create new animal records]. **Please use the calving window (Reproduction > Calving) to enter calvings.**
- On the Add Animals Wizard window, under "What do you want to do?" choose the option applicable to your herd and available data, e.g. Add a New Animal: Minimal Data – Commercial Animal and follow the instructions.
- The **minimum data** necessary for an animal record is ID No. (Farm), Sex, Species, Birth date, Status (Active = Alive/In herd, Non-Active = Dead/Not in herd) and Registered or Commercial. [**Please note:** If an animal's precise birth date is unknown, then please enter an approximate date, e.g. 01 Oct 2014 for animals born in 2014 and check the Birth Date Uncertain box].
- If you want to **link the animals to a camp** on this screen, the camps must be set up first. (See paragraph 15 of this manual). If Animal in No Camp is selected at Camp, what is entered by default in Date in Camp and Reason will not be saved, so leave it unchanged.
- The field Herdmark (if applicable) and Year (of birth) will be completed automatically. **As soon as the Sequence number is completed, the program will automatically create the ID No (Visual)** in the format set up at Settings > Herds > ID Methods and Numbering> Default ID Format. (See paragraph 8 of this manual). If needed, the default ID No can be changed.
- **Begin with the oldest animals** in the herd and work down to the younger animals. **If you want to record the dam and/or sire** of an animal, first create an animal record for the applicable parent(s). When you create the animal record, you can then choose the parent(s) by clicking on the dropdown next to the parent field and choose the parent from the list. If the sire or dam is not in herd, create him/her with Status as Non-active.
- **To view the general data of an animal on the main window**, go on the Animal Layout to the General view window or go on the Herd Layout to the General, Identification and Birth sections.
- **To change (or delete) an animal record**, see paragraph 17.
- **After the animal data has been created, the following information can be added, where available:**
 - **If the purchase data** (e.g. purchase date, purchase price, bought from) **have not yet been recorded on the Add Animals Wizard screen**, it can be recorded on the Purchases screen. See paragraph 14. Use the **Help** function if necessary.

- **To record horn measurements** of animals recorded above, go to Production > Horn and Other Measurements **OR** go to Other Data > Darting Data > General.
- **To record the book and market value of individual animals**, go to Animals > Edit Animals (Table Layout). Use the Help function if necessary. **Please note:** When purchase data of animals is recorded (Movements > Purchases), the purchase price will automatically be entered as the book value of the animal, provided that the book value of the animal was not already recorded.
- **To record the average tax and market values for various categories of animals**, go to Reports > Animal Lists and Numbers > Animal Numbers and Values. At Select Calculation Method at the top left of the window select the applicable method and click on the Add and Edit Animal Numbers Calculation Method icon, complete the Market Value and Tax Value columns and Save.
- **To mark your breeding bulls as breeding bulls**, go to Animals > Add and Edit (Single animal layout) > General Data, highlight the applicable bull, tick the field "Breeding/AI Bull" and click Save. Bulls marked as a breeding bull are listed separately under the "Breeding Bulls" category on the main screen's Herd Layout in the Category column as well as in the Animals Numbers and Values report. The breeding bulls will also be listed on top the list of bulls when recording calvings.
- **If there are females in the herd that have already calved, i.e. which are cows, but the first calving is not on record in BenguFarm**, go to Animals > Edit Animals (Table Layout) and mark the field "First Calf not on Record". Use the **Help** function if necessary. Doing so will ensure that the relevant cows' category (refer paragraph 8.2), depending on their age, is indicated as Young Cows or Mature Cows or Old Cows instead of Breedable Heifers.

14. Purchases of animals:

- **To import or record the animal data of purchased animals**, see paragraphs 12 and 13 above.
- **To record** (or edit/delete) **the purchase data** (purchased from whom, purchase date, price, etc.) **of purchased animals**, go to Movements > Purchases. Use the **Help** function if necessary. **Please note:** If animal records are created manually by using the Add Animals Wizard screen, the purchase information can be recorded on that screen.
- **To create a report of animals that were purchased**, go to Reports > Purchases, Auctions, Sales, Deaths and Culls > Purchases.
- **To view the purchase data of an animal on the main window**, go on the Animal Layout to the General view window and scroll down to the purchase data fields or go on the Herd Layout to the Purchases section.
- **To ensure that the breeding bulls are displayed on top of the list of bulls on the Natural Matings and AI windows**, go to the Add and Edit Animals (Single Animal Layout) window; find the applicable bull and mark (highlight) the bull. Make a tick mark in the field "**Breeding/AI Bull**" and click Save. This will also ensure that active breeding bulls are listed separately in the "Breeding Bull" category on the main screen's Herd Layout in the Category column as well on the Animals Numbers report (Reports > Animal Lists & Numbers > Animals Numbers).
- **To link animals to camp groups**, see paragraph 15. Use the **Help** function if necessary.

15. Link animals to a camp or group and move animals:

- **To link animals to a group (e.g. a camp or management group) or to move animals between groups or camps there are various screens that can be used:**
 - Animals can be linked or moved to camps or groups on the main window's Herd Layout, most recording windows and some report windows (where the option Display Work Sheet is available) by selecting the relevant animals in the S column and clicking on Link Animals to Group. This feature has several options, e.g. moving selected cows' calves to the same or another camp as the dams. **Please note:** If animals are moved to or from a group while that group has been selected on the main screen with the group filter, the animals in the relevant group will only be updated after the group filter has been switched off (No Group Filter) and the relevant group has been filtered again. OR
 - Go to Movements > Move Animals to another Camp or Group. Use the **Help** function if necessary.
 - Animals can also be linked to a camp on the Add Animals Wizard, Add and Edit Animals (Single Animal Layout) and Edit Animals (Table Layout) screens.
 - When calvings are recorded and the cow in question is in a camp on the date of calving, BenguFarm will automatically put the calf in the same camp with the reason Born in Camp.
 - When calvings are recorded and the cow in question is linked to a management group (or another group), BenguFarm will automatically place the calf in the same management group as the mother if

- the column Place Calf in Mother Group is checked at Settings > Groups and Camps > Category > Management Groups (or other type of group) > Add/ Edit/Delete Categories.
- **To link animals which are in a management group also to a camp (or vice versa):**
 - Go to the Herd Layout on the main window and at the group filter (to the right of the Female filter), select the relevant existing group/camp. Select the animals in the S column and click Link Animals to Group. Then link them to the desired group or camp; OR
 - Go to Movements> Move Animals to Another Camp or Group. Select the camp to move the animals to the right at the top of the screen as the active group. In the middle of the screen (under the heading Add / Remove Animals by Group / Camp), by Category, select Management Groups. At Group / Camp, select the relevant management group. Click on the black arrow on the right of the Group / Camp to place the animals in the relevant management group in the camp concerned. Use the **Help** function if necessary.
 - **To edit *existing* camp movements of an animal**, go to Animals > Add and Edit Animals (Single Animal Layout) > General. At the Camps field, click the Edit Camp Movement History button.
 - **To create a report of animals per camp or group**, go to Reports > Camps and Herds > Animals per Camp or Group. **Note:** The animals that are *not* assigned to a camp are listed in a "camp" with code "[none]".
 - **To create a report of animal movements between camps**, go to Reports > Camps and Herds > Camp Movements.
 - **To create a report with the number of animals per species per camp**, go to Reports > Camps and Herds > Camp Species Composition. **Tip:** To see which animals are included in a specific number, click on the specific number.
 - **To create a report of the pasture utilisation of camps for a certain period**, go to Reports > Camps and Herds > Pasture Utilisation per Camp. This report will only be available if the camps are set up with at least the camp sizes. **Tip:** Click the Calculate information button at the bottom right of the screen to see how the calculations are done. **Please note:**
 - This report uses the camp movement history in BenguFarm. It is therefore critical that this data is available for the period for which the report is created.
 - To get the full benefit of this report, specifically the percentage utilisation of the various camps, it is important to set up camp sizes and carrying capacity (LSUs/ha) per camp at Settings > Camps.
 - Animals that have been sold or died should be recorded with the date, etc. at Sales, Deaths and Culls (i.e. their status should not be simply changed to Non-active) to ensure that the period in the last camp is calculated correctly.
 - To see how the number of LSUs is calculated for different animal categories, go to Settings > Herds > Reminders > Default Animal Numbers Calculation Method and click the settings button.
 - The number of LSUs is calculated according to the category in which the animal concerned was at the time when the animal was in the camp.
 - **To view the camp data of an animal on the main window**, go on the Animal Layout to the General view window and scroll down to the camp information fields or go on the Herd Layout to the Camp section. **Tip:** Filter the relevant camp at the Group Filter to only see the animals of a specific camp on the Herd Layout.
 - **To view other groups (e.g. management groups) in which an animal is on the main screen**, go to the Animal Layout to the General view window and scroll down to the My Groups field or go on the Herd Layout to the General section. If there is no column for Management Groups on the Herd Layout, go to Display Options, select the Show Groups of Category option, select Management Groups, and click Save Options as Herd Default.

16. Check if all the animals are on record:

- **To view the important data of animals in table layout on the main screen**, go to the Herd Layout.
- **To view the data of a single animal on the main screen**, go to the Animal Layout, select the animal's ID number in the box (pink or blue) at the top left of the main screen, then click on the relevant view window's link.
- **To check if all the animals are in BenguFarm GAME**, you can create a **herd list** report by going to Reports > Animal Lists and Numbers > Herd List.
- **To create an animal numbers and values report** which will show the number of animals in the herd per category (calves, cows, bulls, etc.), go to Reports > Animal Lists and Numbers > Animal Numbers and Values. See paragraph 8 for more information on how the categories are defined, etc.
- **To check if duplicate animal records have been created and/or imported**, see paragraph 37.

17. Edit or delete data

- **To edit or delete general animal data** (e.g. sex, birth date, ID number, sire, dam and status), there are basically three windows that can be used, namely:
 - **Animals > Add and Edit Animals (Single Animal Layout):** Use this window for changes to single animals or unique fields such as ID No. Use the **Help** function if necessary.
Tip: The Add and Edit Animals window can be used for single animal editing as well as multi-animal editing. To select a single animal, click ONCE on the animal's number so that the number is only highlighted. To select multiple animals, DOUBLE click on an animal's number so that a tick appears in the box next to the number. Then click Multi Edit at the bottom left of the window.
 - **Animals > Edit Animals (Table Layout):** Use this window for the same change to multiple animals, e.g. to change the calving season for a group of calves. The screen can also be used to delete animal records, if necessary. Use the **Help** function if necessary.
 - **Reproduction > Calving window:** If you want to change something (e.g. a calving date) on an existing calving, choose the applicable cow, click on the "N" next to her number and choose the calving you want to change. Use the **Help** function if necessary.
- **To edit or delete specific (non-general) data** (e.g. matings, pregnancy tests, vaccinations, illnesses and treatments, procedures, purchases and sales), go to the window where the relevant type of data was originally entered. If, for example, sales records need to be changed, go to Movements > Sales, Deaths, and Culls. To display the existing data that needs to be changed, click at the top right of the window on **Load Existing Records**. When the animal or group of animals was selected, this animal(s) data can be edited and saved. If the same change needs to be made for several animals, mark the specific animals which data need to be edited with a tick in the first ("S" = **Select**) column. Now the relevant data can be changed in the Multi Edit / Add New area at the top of the window and saved. Use the **Help** function if necessary.
- The **Data Navigator** window [Animals > Data Navigator] can also be used to edit data and delete records of various types. Use the **Help** function if necessary.

18. Backup and restore of the database(s) and other info:

- **VERY IMPORTANT!!! Please read the following paragraph carefully.**
 - **The BenguFarm database, photos, et cetera are NOT kept in the cloud, in other words it is kept on the computer itself.** This means that if the computer is stolen or the hard drive get damaged or a virus damages the computer files, the BenguFarm data, et cetera will be lost.
 - **It is critically important to make a backup of your BenguFarm database(s), saved report layouts, photos & documents, etc. on a REGULAR basis,** especially after you have added or edited some data, before you let someone else work on your computer, etc.
 - **It is equally important to save the backup in a SAFE PLACE,** e.g. a cloud-based place like Dropbox, GoogleDrive or OneDrive and/or on an external hard drive or memory stick. Keep this external hard drive or memory stick in a safe place separate from your computer to prevent it being stolen with your computer.
- **To change the default place where your backup files will be saved,** go to Settings > Herds > Default Folders for Files > Default Folder where Backup Files will be Saved. **Please note:** The default place on the computer's hard drive (C:\BenguFarm\Game\Backups\[Herd]) is NOT a safe place to save the backup, since it will be lost if the computer is stolen or get damaged.
- **To make a backup,** go to File > Backup and Restore. Under the heading Create a Backup, select the type of data (Database(s), Saved Report Layouts, Photos & Documents) of which you want to make a backup. Under the heading Make Backup To, select the location where you want to make the backup file. Click to the right on Backup to make the backup. Use the **Help** function if necessary.
- If you have more than one database in BenguFarm, remember to make a backup of each database.
- **To make a backup that includes everything** (database(s), saved report layouts, photos & documents, etc.), select Full System Backup (BFSysBackup folder).
- From time to time you may delete old backup files not necessary anymore.
- **To set up a BenguFarm reminder to make backups on a regular basis,** go to Settings > Herds > Reminders.
- **To restore a backup:**
 - If you have more than one database on BenguFarm, ensure you are in the correct database.
 - Go to File > Backup and Restore.
 - It is always a good idea to make a backup of the current data before backing up - just in case something goes wrong.

- **To restore a database backup**, the option Restore Full System Backup option (Select BFSysBackup directory) under the heading Restore a Backup should NOT be selected. Click on Browse, go to where the backup was saved, select the **Database Backup**_[date+time] file, click Open and click Restore.
- **To restore a full system backup**, select the option Restore Full System Backup (Select BFSysBackup directory) under the heading Restore a Backup. Click on Browse, go to where the backup was saved, select the **BFSysBackup**_[date+time] **folder**, click Open and click Restore.
Please note: If a full system backup is restored, ALL databases' data will be overwritten.
- **To transfer data from one computer to a new or another computer:**
 - **On the old computer:**
 - Insert a memory stick on which you are going to make a BenguFarm backup into the computer.
 - Open BenguFarm and go to File > Backup and Restore.
 - Under Make a Backup, choose from What Type of Data do you want to make a Backup the option Full System Backup (BFSysBackup folder).
 - Click on Browse and select the memory stick drive and a folder where you want to make the backup.
 - Click on Backup. In the selected folder a sub-folder with the name BFSysBackup_[date+time] in it will be created where all the applicable data, photos, etc. will be saved.
 - Remove the memory stick with the backup from the computer.
 - **On the new computer:**
 - Insert the memory stick with the backup you've made into the new computer.
 - Make sure BenguFarm is the same or newer version than on the old computer. (See the top of the main screen for the version date).
 - Open BenguFarm and select Restore a Backup from the Welcome window.
 - Under the heading Restore a Backup, select the option *Restore Full System Backup (select BFSysBack... folder)*. Click on Browse and go to where the backup is on the memory stick and select the BFSysBackup_[date+time] folder.
 - Click Restore.
 - To register BenguFarm on the new computer, please contact Philna Moulich at 051 4100 910 or send her an e-mail to registration@benguelasoft.co.za and give her the Computer Identification Code at the top left of the Registration screen and your BenguFarm account name number (BPU___).
 - All your BenguFarm data, photos, settings and own reports should now be on your new computer.
- **Please note:** All settings of all herds (where applicable) on the relevant database is included in the backup of the database. Existing settings are therefore overwritten when a backup is restored.

19. Synchronisation of data between computers:

BenguFarm can be installed on more than one computer with one license (i.e. no extra cost), provided it is used only for the registered user's herd(s). To install BenguFarm on a new/additional computer, register it and restore a backup, go to bengufarm.co.za > Downloads > Software. Scroll down to "Install on new computer and transfer data" and follow the step-by-step instructions.

VERY IMPORTANT!!!

The BenguFarm database is NOT "cloud" based, it is on the hard drive of the relevant computer on which the program is installed. This means that data recording/editing can normally only be done on one computer, unless the BenguFarm database is moved to a network server ("server") - see the network option below.

If you have installed BenguFarm on more than one computer, there are various options to synchronise the data between computers and to give access to all the persons who need to work on BenguFarm to the newest data on BenguFarm. These options are:

- **Synchronisation via the "Cloud"** (recommended option): For clients who use BenguFarm on more than one computer, this function makes it possible to record data on two or more computers and synchronise it from time to time via the "Cloud" without the risk of losing data. There is currently no extra cost to use the "Cloud" sync function. Customers who use BenguFarm on more than one computer and want to make use of this function must contact their BenguFarm agent or Mr. Leslie Bergh at leslie@benguelasoft.co.za or

0828012026 to activate this function. Tim Pauw will then send the customer an email with the step-by-step instructions to start the synchronisation.

- **Master computer option:** With this option (which is presently used by most farmers), the owner should decide on a master computer, i.e. the only computer on which new data will be entered and changed. A backup of the BenguFarm database is then made on a regular basis on the master computer, shared (e.g. via memory stick, e-mail, Teamviewer's File Transfer or Dropbox) with the other users and each of them then restore the backup on his/her computer. The other users therefore use the program only for queries and reports, in other words they do not enter new data or change or delete data. This process is very quick and easy. **Note:** The first time a backup is made on one computer and restored on another computer, a registration and access code will be necessary to register that BenguFarm database on the new computer. After that backup and restore can be done without the need for a registration and access code. [See paragraph 19 for backup and restore functions].
- **Network option:** If the computers are linked to a network, e.g. a LAN, BenguFarm can be installed on various computers, the BenguFarm database can be put on the server and each computer's BenguFarm linked to the database on the server. This way everyone has simultaneously access to the same live database. Depending on some technical aspects, the program can in certain cases be a bit slower because it needs to access the database via a network. Many of our clients make use of this option and, provided the server is always on and all people always have access to the server, this option works well. For instructions to set up BenguFarm for a server, contact your BenguFarm agent or Mr. Leslie Bergh at leslie@benguelasoft.co.za or 0828012026.
- **Multiple database option:** This option works well where are for example two managers, each on a separate farm, who are responsible for the data recording on BenguFarm of the herds/species on a specific farm, e.g. Farm A and Farm B respectively. In such a case, separate databases for each manager/farm can be set up and registered. On the owner's computer two databases can be set up and registered, one for Farm A and one for Farm B. The manager of Farm A can on a regular basis makes a backup on his computer of Farm A's database and it send (via e-mail, Dropbox, etc.) to the owner. The owner can then restore the backup on his computer without effecting the data of Farm B. The same apply for farm B. In this way the owner can have access to the newest data without working directly on the two master databases.

SECTION B – BASIC FEATURES:

20. Basic steps of data recording:

The basic steps of the data recording process are as follows:

1. Print recording list (if applicable); and
2. Record data on recording list; and
3. Enter data from recording list on BenguFarm.
4. OR record data on BenguFarm Mobile app and synchronise with PC program.
5. Check data on main screen (Refresh Screen).
6. Create report(s) of data.

21. Matings and inbreeding calculation for planned matings:

- The recording of matings is only applicable if breeding seasons are practiced. **If breeding seasons are *not* used and matings are *not* recorded, pregnancies can be recorded on the Darting Data window** [Other Data > Darting Data > Pregnancy].
- If breeding seasons are used, we recommend that you record the natural matings and/or artificial inseminations (AIs) in BenguFarm GAME as soon as the bulls are put with the cows and/or the AIs are done. This has various advantages, inter alia that lists to record pregnancies can be created from BenguFarm GAME and it is also much easier to record calvings in BenguFarm GAME, because the possible matings/sires are then available.
- **To create a list of breedable heifers and cows** (if applicable), go to Reports > Reproduction > Breedable Heifers and Cows (recording list). **Tip:** Filter the relevant camp at the Group Filter to only see the animals of a specific camp on the Herd Layout.
- **To create a list on which specific, *observed* matings can be recorded** (if applicable), go to Reports > Reproduction > Matings (recording list).
- **To calculate the inbreeding percentages of progeny for possible matings**, go to Reproduction > Inbreeding Calculation for Planned Matings. Use the **Help** function if necessary.
 - Inbreeding percentages in **red** are higher than the value set (default = 6.25%) for "Warn if the Inbreeding percentage is higher than" at Settings > Herds > Mating, Pregnancy and Calving and such matings should be avoided.
 - Check the option "Calculate Inbreeding for Females born from Multi-sire Matings for Possible Sires" at the top of the window to calculate the maximum inbreeding for the selected females that was born from a multi-bull mating, i.e. where the sire is ?MULTISIRE? and the respective bulls were specified. If this option is checked, the inbreeding will be calculated as if each of the multiple bulls is the sire of the female and the highest inbreeding for all the given bulls will be displayed. Note that where an animal without a sire, but with a multi-sire mating, appears anywhere else in the pedigree, the calculation will be done as if that sire is unknown.
 - If the light bulb in the "Q" (Queen) column shows in red, it means the female was born as one of twins with a male. Such females are usually infertile.
 - Click on the **Common Inbreeding %** button at the bottom of the screen for the inbreeding percentages of some common matings.
 - When the inbreeding percentage of possible matings are calculated and there is inbreeding, go on the Animal Layout of the main window to the Pedigree view window of the concerned parents to see which animal(s) is the **common ancestor**.
 - **Matings can be recorded directly on this screen** by selecting the relevant bull(s) and cow combinations and record the matings for the selected combinations at the bottom of the screen.
 - For an **article on the dangers of inbreeding**, contact Mr. Leslie Bergh at leslie@benguelasoft.co.za or 082 801 2026.
 - **To create a pedigree report**, go to Reports > Animal, Pedigree and Progeny > Pedigree. **Common ancestors** (which cause inbreeding) will be displayed on a red background on the pedigree report for easy identification.
 - **To see which animals are related to a specific animal** (e.g. a bull), go to Reports > Animal, Pedigree and Progeny > Related Animals.

- **Before recording matings in BenguFarm GAME:**
 - Ensure that **all the cows, heifers and breeding bulls (including AI bulls) are on record** in BenguFarm GAME.
 - To ensure that **breeding bulls** (herd sires) are displayed on top of the list of bulls on the Natural Matings and AI windows, go to the Add and Edit Animals (Single Animal Layout) window, find the applicable bull and mark (highlight) the bull. Make a tick mark in the field "**Breeding/AI Bull**" and click Save. This will also ensure that active breeding bulls are listed separately in the "Breeding Bulls" category on the Animal Numbers report (Reports > Animal Lists & Numbers > Animal Numbers).
 - **If a bull is used in more than one herd** that is on the *same database* in BenguFarm GAME, go to Animals > Add and Edit Animals (Single Animal Layout) > General Data and mark the field Visible for Reproduction in All Herds. And Save. A bull marked as such will be visible on the Matings screen in the list of bulls to select as the bull and on the on the Calving screen to select as the sire of a calf. However, the bull will not be listed in the other herd as an active bull in the herd list.
 - Ensure that the applicable **calving season** has been created. [Refer the Settings section above to create a new calving season].
 - If animals are linked to **camp groups**, remember to move the animals of the new breeding groups to the relevant camp in BenguFarm before the new matings are recorded in BenguFarm because then the camp group can be used to select the animals for the registration of coverings. If there are also calves in the camp, check at Existing Groups also Birth Date and choose the dates of birth to exclude the calves.
- **To record** (or edit/delete) **matings**, go to Reproduction > Matings and choosing the applicable mating method (e.g. Natural Mating). Use the **Help** function if necessary.
- **If multi-sire mating groups are used**, choose in the Bull field the *default* "?MULTISIRE?" record listed directly under the breeding bulls.
 - **Please note:** Do NOT create a "Multisire" animal record yourself, as BenguFarm will consider it as a real bull and then all animals with "Multisire" as sire will be related.
 - To choose the bulls in the specific multi-sire bull group, tick the box next to Multi Sires and then click on the "+" to select the applicable bulls.
 - **To see which bulls are the possible sire of an animal**, go on the main window to the Animal Layout > Birth view window > Mating Bull(s).
- **If a bull cannot continue mating during the mating season** (sick/injured/dead):
 - Change the Bull Out date on the existing mating records [Natural Matings > Load Existing Records];
 - If the bull died, remove the Breeding/AI Bull mark from the bull's record and record the death on the Sales, Deaths and Culls screen;
 - If the bull is replaced with another bull for the remainder of the mating season, record new mating records for the replacement bull at Natural Matings.
- **To create a report of existing matings**, go to Reports > Reproduction > Existing Matings (Mating Lists). See Appendix B for expected calving date calculation.
- **To view the last mating data of an animal on the main window**, go on the Animal Layout to the Last Mating view window or on the Herd Layout to the Previous and Last Mating sections. **Please note:** Only existing matings, in other words matings of which the cow has not yet calved, are displayed here. To view all the mating and pregnancy data of an animal on the main window, go on the Animal Layout to the Mating and Pregnancy History view window.

22. Pregnancy tests:

- **Please note: Pregnancy test results can be recorded without mating recordings. To do this, go to Other Data > Darting Data > Pregnancy.**
- **To create a list to record the pregnancy test results**, go to Reports > Reproduction > Cows & Heifers for Pregnancy Test (recording list).
- **To record** (or edit/delete) **pregnancy test results**, go to Reproduction > Pregnancy Test. Use the **Help** function if necessary.
- **To create a report of matings and pregnancies**, go to Reports > Reproduction > Matings and Pregnancies. **Please note:** If the Existing Matings option is selected, only mating and pregnancy records of heifers and cows which have not yet calved, will be listed. If *only* the option Pregnant and/or Not Pregnant (i.e. Existing Matings is *not* selected) is selected, mating and pregnancy records of all relevant heifers and cows will be listed, regardless of whether they have calved or have not yet calved. See Appendix B for expected calving date calculation.

- **To create a report with a summary of matings and pregnancies per bull and/or season** (if applicable), go to Reports > Reproduction > Mating Summary per Bull and/or Season.
- **To view the last mating and pregnancy data of an animal on the main window**, go on the Animal Layout to the Last Mating view window or on the Herd Layout to the Pregnancy section. On the Herd Layout expected calving dates of cows that should have calved more than 14 days ago are highlighted in red.
Please note:
 - Only existing matings, in other words matings where the cow/heifer has not yet calved, are displayed here. To view all mating and pregnancy data for a cow/heifer on the main screen, go to the Mating and Pregnancy History view screen on the Animal Layout.
 - Once pregnancy has been recorded, only the mating(s) from which the cow/heifer could be pregnant will be displayed under Last Existing Mating (and under Previous Mating if she could also be pregnant from that mating). For example, if a cow was AI-ed, a follow-up bull was added and pregnancy was recorded with a period pregnant and the gestation period only matches the follow-up bull's mating record, only the natural mating will be displayed and not the AI record. For example, if the cow only has a mating record of 1 November 2024 and a pregnancy record of two months pregnant on 1 May 2025, that mating record will not appear, as she should have already been six (not two) months pregnant from the AI cover on 1 May.
- **To view *all* the mating and pregnancy data of an animal on the main window**, go on the Animal Layout to the Matings and Pregnancy History view window.

23. Calvings/calves born (including abortions, still born calves, etc.):

- **To create a report of heifers and cows near calving**, go to Reports > Reproduction > Heifers and Cows near Calving (recording list). The various **options used to calculate expected calving dates** of heifers and cows are explained in detail in Appendix B.
- Before you record calvings, ensure that you have recorded the applicable matings and pregnancy test results (if applicable) in BenguFarm GAME (refer paragraphs 21 and 22). **Please note:** The recording of matings apply only where breeding seasons are used. See below for how to choose the sire where no matings were recorded.
- **To record** (or edit/delete) **calvings (and calves)**, go to Reproduction > Calvings.
 - Choose the applicable cow/heifer, choose the calving date, choose the sire and complete and/or change the rest of the details, where applicable. Use the **Help** function if necessary.
 - **Please note:**
 - Most of the fields will be filled by default with the applicable data as retrieved from the Settings you have done in BenguFarm GAME (refer paragraph 8). The calf's sex, birth date, birth weight and the cow's weight at calving (if recorded) should be completed by you.
 - **If a mating(s) was recorded for the applicable cow** which could cause a calving on the calving date (according to the minimum and maximum pregnancy period as set up at Settings > Herds > Matings, Pregnancy and Calving), the most probable bull's number (based on the expected calving date) will automatically be displayed as the sire of the calf. If there are two matings listed as possible matings, the sire is not certain.
 - **If "New Mating" is displayed in the Bull (Mating) field** after the calving date has been entered, it means that there is no mating on record for the cow which could cause a calving on that calving date. In such a case the bull should be selected at the Mating Data to the right of your window, in which case a default mating record will be created.
 - **If matings were not recorded** (because no mating seasons were practiced), the relevant animals are linked to camps and camp movement history is available, you can **determine the possible sire of a calf from the camp movement history**. On the Mating Data area of the calving window, click on the button "Bulls in the Same Camp as Cow at Mating" to the far right of the Bull field. This will bring up a window displaying the bull(s) that were in the same camp as the cow at the stage the cow should have become pregnant. You can select this bull (or bulls as multiple sires) as the sire of the calf.
 - **To change a calf's sire** which was recorded at birth as unknown [?UNKNOWN?] OR recorded as multi-sire [?MULTISIRE?] OR recorded incorrectly, go to the Add and Edit Animals (single animal layout) and select the appropriate calf. At the Mating (not Sire) field, select the appropriate mating (bull) or New Mating from the list. A Mating Details window will open (on a light blue background). Select the correct bull (sire) here, click Save and Exit.
 - If the **sex of a calf is uncertain or unknown** at the time of recording the calving, choose either male or female and mark the "?" (sex Uncertain or Unknown) field to the right of the

animal sex field. The ID No of animals with sex uncertain or unknown will be displayed with a red background colour in the animal list on the main window. When the sex is later confirmed, go to Animals > Add and Edit Animals (Single Animal Layout), remove the tick in the Sex Uncertain field and, if necessary, change the sex and Save.

- If the **default sequence number** of the calf is need to be changed, change it in the Sequence Number field.
- **Abortions, stillborn calves and calves that died shortly after birth** should be recorded to change the pregnancy status of the applicable cows and to make their reproduction records complete. Select the appropriate option (e.g. Still born) in the field Calf Status (at birth). A **fictitious number** can be assigned to such calves, e.g. ABC2000D1 (D for Dead) or ABC209001 (sequence number outside the normal range) for the first dead-born calf in 2020.
- **To correct the pregnancy status of cows that were recorded as pregnant at pregnancy test, but dID Not calf**, go to the Pregnancy Test screen, click Load Existing Tests, select the applicable cows, remove the tick in the Pregnant column and change the period to 0 (zero). Make a comment in the Remarks column "Was originally tested pregnant but dID Not calve" and Save.
- If a new calf is seen, but it **cannot be determined which cow it was that calved**, the calving cannot be recorded on the Calving window, because the cow cannot be selected. To record such a calf's birth in BenguFarm, go to Animals > Add and Edit Animals (Single Animal Layout), click "+ Add", complete the necessary birth data and Save. When the mother is later identified, go back to this window, select the calf from the list of animals, select the mother in Dam field and Save.
- If a cow has calved, but it **cannot be determined which calf is that cow's calf OR if a calf was not numbered at birth**, record the calving normally on BenguFarm with the next available sequence number for the calf but add a D at the end of the calf's number (e.g. 15-1D) to indicate that this is only a dummy number. When the calves are numbered (with an ear tag) and a specific calf can be positively linked to the cow (e.g. seen that a specific calf is suckling the applicable cow), go in BenguFarm to Reproduction > Calving and select the particular cow. Next to the cow's number is a field where an "N" will be. Open the list and select the appropriate calving date (with the dummy number calf). The relevant calving will be displayed on the Calving window. At the calf's Sequence number, change the dummy calf number (e.g. 1D) to the correct calf number (e.g. 8) and click Save.
- **To record twins**, ensure that you choose Twins in the field # Calves (Birth Status). BenguFarm GAME will automatically create two tabs with calf numbers at the top of the grey area (calf information) of the window. Click on the first calf's number and complete the calf's details. Then click on the second calf's number and do the same.
- To record that a calf is reared by a **foster dam or orphaned**, go on the Calving screen to the Foster Dam field (bottom left). It can also be recorded by going to Animal > Add and Edit Animals (single animal layout) > General > Foster Dam. In the list there is also an **ORPHAN PENS** option that can be used for calves raised as orphans.
- **To edit an existing calving/birth data**, go to the Calving window, choose the applicable cow, click on the "N" next to her number and choose the calving you want to change.
- **To delete an existing calving/calf**, go to Animals> Add and Edit Animals (Single Animal Layout). Select the calf in question and click Delete.
- **To create a report of heifers and cows that have calved/not calved yet**, go to Reports > Reproduction > Heifers and Cows that Calved/Not Calved Yet (recording list). See the notes at Report Interpretation for which animals are listed for the various scenarios.
- **To create a report with a summary of matings, pregnancies and calvings per bull and/or season**, go to Reports > Reproduction > Mating Summary per Bull and/or Season.
- **To create a report of cows which performed poorly according to certain reproduction and pregnancy minimum standards** (that you can set yourself), go to Reports > Inspections and Selections > Reproduction and Pregnancy Selection.
- **To create a report of calves born in a certain period** (e.g. calving season or year), go to Reports > Reproduction > Births. **Tip:** Remember to also select the non-active filter to include calves recorded as abortions, stillborn, died at/shortly after birth. This is important to get the correct summary of percentage calves born alive, stillborn, etc.
- **To view the birth data of an animal on the main window**, go on the Animal Layout to the Birth view window or go on the Herd Layout to the Birth section.

- **To view the reproduction and progeny averages data of an animal on the main window**, go on the Animal Layout to the Reproduction and Progeny Av. view window or go on the Herd Layout to the Reproduction section.
- The various **reproduction calculations** in BenguFarm GAME are explained in Appendix B.

24. Parentage verification and other DNA services:

- **To create a DNA service request form** that should accompany the applicable animals' biological samples to the DNA laboratory, go in BenguFarm GAME to Data Send/Import > Send > DNA Profiling Service Forms and select the applicable laboratory you use. Use the **Help** function if necessary.

Please note:

- If you want to keep a record of which animals' DNA were sent for analysis, mark at the bottom right of the window "Yes, keep record of sent DNA samples specified below".
 - To ensure the customer's details are completed correctly on the service request form, make sure all relevant fields (Owner, Farm Name, Invoices Made Out To, VAT No. and Postal Address) is completed at Setting > Herds > General.
 - NRF/NZG DNA Services: The form includes a reference number that should be used with payment. You will have to contact NZG to get a valid reference number as they use the form also as an invoice and you must use the reference number with the payment.
- **To print labels for the marking of the envelopes in which biological samples** (e.g. tail hairs) **of animals are placed** for submission to a DNA laboratory or keep for later use, go to Data Send/Import > Send > DNA Profiling Service Forms > Print Biological Sample Labels. Select the relevant options at the top left and bottom left, select the animals and click Display Printout. Now select the size of the labels and other options and click Display Report.
- **To create a report of DNA samples sent for analysis**, go to Reports > Administration > Log of DNA Samples Sent. If an animal's DNA Number does not appear on the report, it indicates that the results of the animal concerned have not yet been received and/or not yet imported/recorded in BenguFarm.
- **When the DNA report is received from the DNA laboratory, the applicable animal's DNA numbers, correct parentage and bloodline (where applicable) can be recorded and certified** at Animals > DNA Verified Parentage and Bloodlines. **Please note:** The DNA numbers *must* be completed before the certification field can be checked. You should also check the certification declaration at the bottom of the window before the data can be saved. **Tip:** To record the **bloodline percentages** obtained from the nuclear DNA analysis, click on the puzzle icon (Bloodline Composition) next to Analysis Type. This icon will only be displayed if nuclear DNA was selected at Analysis Type.
- **Please note:** The **ZooOmics DNA lab** will also send you a CSV file which you can import directly into BenguFarm, saving you the trouble to record the parentage and/or bloodline results by hand in BenguFarm. To import this CSV file, go to Data Send/Import > Import > ZooOmics DNA Results.
- Certified parents will be displayed with the DNA icon on the main window in the Pedigree view window.
- On the Add and Edit Animals window [Animals > Add and Edit Animals] the parents are displayed in the same way as certified. If the parents are changed here, the certification expires and the certification for the newly selected parents should be done again on the certification window. Certified parents will also be displayed with the DNA icon on the Animal Summary report [Reports > Animal, Pedigree and Progeny Summary > Animal Summary, Sale Catalogue report [Reports > Purchases, Auctions and Sales > Sale Catalogue] and Pedigree report [Reports > Animal, Pedigree and Progeny Summary > Pedigree].
- **To view the DNA number of an animal on the main window**, go on the Animal Layout to the General view window and scroll down to the DNA Number field or go on the Herd Layout to the Identification section.
- **To create a report indicating which animals' parents are certified in BenguFarm**, go to Reports > My Reports > Animal Data. Click Choose Animals (Criteria) to choose the animals. Then click on Report Columns (Layout). Under the General section, select Sire DNA Verified and Dam DNA Verified. Click View Report to see what the report will look like.
- **To create a report with the DNA Verified Parentage and Bloodlines data**, go to Reports > Animal, Pedigree and Progeny > Animal Summary and make sure the option Print DNA Verified Information is selected.
- **To view the bloodline of an animal on the main window**, go to the General view window and scroll down to the bloodline information fields.
- **Tip: Save the animal's DNA certificate as a document** on BenguFarm - see paragraph 23 below.

25. Photos and documents:

- **To import** (or edit/delete) **animal photos and documents** (e.g. purchase invoice, DNA certificate, fertility/pregnancy certificate, sale invoice), go to Other Data > Photos and Documents. Use the Help function if necessary.
Please note: Photos in BMP, GIF, JPEG PNG and TIFF format and documents in any format can be imported. A **video** can also be imported and viewed as a document.
- **To view an animal's photos on the main window**, go on the Animal Layout to the Photos view window.
- **To view an animal's documents (including videos) on the main window**, go on the Animal Layout to the Documents view window, select the document and click on Display Document.
- **Photos of an animal and/or its parents can be displayed on the Animal Summary, Sale Catalogue and Pedigree reports.** A maximum of 4 photos can be included in the Animal Summary and Sale Catalogue reports.
 - The **photos of an animal** will only appear if the relevant photos were selected on the Photos and Documents window in the Reports column to be displayed on reports. Please note that a maximum of four photos can be selected for inclusion in a particular report.
 - The **photos of an animal's parents** to be used will be the applicable parent's primary (default) photo, if marked for display at the applicable animal (parent) in reports, or else the latest non-primary photo (by picture date) which is marked for reports will be used.
- **To display an animal, its pedigree and progeny's pictures on one screen**, go on the main screen to the Animal Layout > Photos view screen and click below the animal's photo on the Pedigree and Progeny Photo Browser button.

26. Estimate horn measurements from a photo:

An animal's horns can be "measured" or estimated from a photo with the Photo Tape function in BenguFarm-GAME. With this function users can, without the need to dart the animal, get an accurate estimate of an animal's horn measurements. These estimated measurements can be used to "screen" animals and then select only promising animals for actual measurement. See the instructions below to use the Photo Tape function and for important aspects to increase the accuracy of horn length estimates.

1. **Go to Production > Photo Tape.**
2. There are several aspects that play a role in the accuracy of the "measurement". We therefore prefer to refer to "estimate" instead of "measurement", as it is not an exact science and the measurements that are obtained in this way is not necessarily 100% correct, depending on certain technical aspects.
3. At the top of window (on the green background) the most important issues related to the estimation of measurements from photographs are highlighted.
4. Use the **step-by-step Help function** at the top right of the window to learn how to use the window. In the Help function's text aspects that could influence the accuracy of estimation are also referred to.

Important aspects that affect the accuracy of estimates:

1. The larger the picture can be displayed, the better.
 - 1.1. If possible, use a "big computer screen (e.g. 27") instead of a small (e.g. 14 ") screen when this function is used.
 - 1.2. Zoom the photo as large as possible so that the horn that should be measured just fit on the window. The picture can be moved horizontally and vertically on the window so that only the horns are displayed.
2. There must be an object (e.g. an ear tag) on the photo that can be used as a scale object. The photo must first be calibrated using the scale object before measurements can be estimated on the photo.
3. For calibration you must know beforehand exactly how big the scale object (e.g. an ear tag with a circle on that 67mm wide). **Tip:** Record the ear tag size in Notes on the animal's record in question for future use.
4. The scale object (e.g. ear tag) must be photographed straight from the front, i.e. at an angle of 90° with respect to the camera.
 - 4.1. Ear tags with a circle on it is available (e.g. from RFID Experts). Depending on the size of the tag, the circle has a certain diameter (e.g. 67mm). The diameter of the circle can be used to calibrate the picture. The advantage of these tags is that, as long as the circle is turned towards the camera with at least one level at an angle of 90° with respect to the camera, there will be at least one level where the diameter can be calibrated correctly. If the tag is tilted for example *horizontally* when the photo was taken, the *vertical* diameter of the circle can be used to calibrate the picture. If the tag is tilted *vertically* when the picture was taken, the *horizontal* diameter of the circle can be used.

5. The horn that should be measured must be the same distance as the scale object (e.g. ear tag) from the camera. The further or nearer the scale object is to the camera in relation to the scale object, the less accurate the calibration of the photo will be.
6. As with the scale object, the horn that should be measured must be at a 90° angle in respect of the camera. (For sables, the horn that should be measured must be photographed from the side. For buffalo horns' spread, the buffalo must face straight to the camera).
7. It is extremely important to mark the scale object (e.g. an ear tag) as accurate as possible with the blue line. An error that is made here, will *pro rata* affect the assessment of the horn length. Zoom in as much as possible on the photo so that the tag which is to be measured only just fit on the screen to ensure that the ear tag can be measured as accurate as possible.
8. As with the scale object (ear tag), it is essential to mark the horn as accurately as possible (with the red line). Where it is a curved line (e.g. sable horns), the curve should be followed as accurately as possible. **Tip:** If you make a mistake with the "measurement" of the horns, right click on the red line to undo.

27. Horn measurements and other data collected at darting of animals:

- **To create a list for recording animals' horn measurements and other traits at darting**, go to Reports > Production > Trait Lists (recording list). At Select Items to Print, select the traits you want to record and with the right arrow add it to the Items to Print on Report.
- **To create a list for recording vaccinations, dosings, supplements and procedures at darting**, go to Reports > Diseases – Prevention and Treatments > Vaccinations, Dosings, Supplements and Procedures (recording list). At Select Items to Print, select the vaccinations/dosings/supplements/ procedures you want to record and add it to the Items to Print on Report with the arrow pointing to the right.
- **To record (or edit/delete) various data (including horn measurements) collected at the darting (tranquilising) of an animal on one window**, go to Other Data > **Darting Data**.
 - Select a date (at Enter Date) OR Add/Select a Vet Visit. To create a new Vet Visit record, click on Add / Edit next to the Select a Vet Visit field. Click on Add Vet Visit (top right of window), complete the applicable data and Save.
 - Click on the General tab to record horn measurements, photos, camp movements, pregnancies (females), fertility data (bulls), veterinary notes and internal parasites (egg counts).
 - **Tip:** Horn measurements must be recorded with decimals. See the button "i Fractions to Decimals" at the bottom of the screen for **converting fractions to decimals**.
 - See paragraph 26 for instructions to use the **Photo Tape function** and for important aspects to increase the accuracy of horn length estimates.
 - Click on the Vaccinations, Dosing and Supplements tab to record vaccinations, dosings and supplements (e.g. vitamin injection) data.
 - Click on the Diseases/Injuries and Treatments tab to record diseases, injuries and treatments.
 - Click on the Other tab to record a microchip implant and DNA sample collection, weights and other procedures (e.g. Sedate animal, Put pipes/caps on horns, Hooves trimmed)
- **To edit or delete a *single* animal's existing Darting Data**, go to Other Data > Darting Data, select the relevant animal and at Saved Dates for This Animal, select the applicable date. The data will now be displayed. It can, if necessary, be changed, added or deleted and saved.
- **To edit or delete the *measurement date* of an animal(s) or to edit or delete *various* animals' horn or other measurements**, go to Production > Horn and Other Measurements. Click at the top right on Load Existing Records and select the appropriate measurements date.
- **To create a report of other trait measurements/scores**, go to Reports > Production > Traits Report.
- **To view the horn measurements of an animal on the main window's Animal Layout**, go to the Horn Measurements view window.
 - The **growth per month since birth** is displayed in round brackets after the measurement.
 - **To display the horn growth between measurements** instead of since birth, go to View > Horn Measurements View Screen Options and select Show Growth Between Measurements. The horn growth between measurements is displayed in **square brackets** after the measurement.
 - **To choose which traits to be displayed on the graph**, click on the hammer and wrench button left on top of the graph.
- **To view the *last* horn measurements of animals on the main window's Herd Layout**, go to the **Last Horn Measurements section**.
- Other trait measurements/scores can be viewed on the Animal Layout of the main window on the Trait Measurements view window.

- **To create a report to compare animals' horn growth by means of the horn growth index**, see paragraph 28.
- **To create an animal summary report with various types of data** (including general information, photos, pedigree with DNA certified parent symbols, progeny, horn and other measurements, microchip implants, internal parasites, vaccinations, dosings and supplements, illness/injuries and treatments), go to Reports > Animal, Pedigree and Progeny Summary > Animal Summary.
 - To include **photos of the animal** and/or its parents in the Animal Summary (and Sale Catalogue) report, see paragraph 25 above.
 - The **farming enterprise's logo** can be displayed on top of the report. The logo should be in a picture format, e.g. jpeg, i.e. *not* in pdf format.

Please note:

- Horn measurements and other traits (also scores) can also be recorded at Production > Horn Measurements or Weights and Recordings not linked to a Test > Traits. Use the **Help** function if necessary.
- See Appendix B for the various **reproduction and horn measurement calculations** in BenguFarm GAME.

28. Selection:

- **To create a report of horn measurements to compare animals' horn growth by means of the horn growth index**, go to Reports > Production > Horn Measurements Evaluation. **Note:** See Appendix B, section Horn Measurements for the **interpretation and use of horn growth calculations and indexes**. **Please note:** It is very important to select animals to be included in the report in such a way that environmental effects that can influence horn growth (e.g. age and nutrition of animals), are eliminated as far as possible. Male and female animals are automatically evaluated in separate groups. **Tip:** At Report Options the relative importance of traits can be selected for the calculation of the average index (last column on the report).
- For a **description of the various reproduction and horn measurement calculations in BenguFarm-GAME**, see Appendix B. See the Horn Measurements section for the interpretation of the calculations in the horn measurements evaluation report.
- **To create a report of cows which performed poorly according to self-chosen reproduction and pregnancy minimum standards**, go to Reports > Inspections and Selections > Reproduction and Pregnancy Selection. See Appendix B for the interpretation and use of calculated values in BenguFarm.
- **To create a report of animals which performed poorly** according to self-chosen standards (that you can decide yourself), go to Reports > Inspections and Selections > Breeding Herd Selection. [Not available yet].
- **To create a progeny report of a cow or bull**, go to Reports > Animal, Pedigree and Progeny > Progeny Summary. [Not available yet].
- **To highlight certain animal data** (e.g. cows with an average inter-calving period of more than 400 days **on the main screen's Herd Layout** as well as setting up rank values for the selected criteria (the total rank value to be displayed in the General section in the Rank column), click Display Options at the bottom of the main screen's Herd Layout and then click at the top of the Display Options screen on Setup Herd Layout Highlighting (button with small squares with different colours). Use the **Help** function if necessary. See paragraph 7 for how to create a report with selected columns from the main screen's Herd Layout.

29. Sales, hunts, deaths and culls:

- **To create a sale catalogue report**, which can be useful in marketing, go to Reports > Purchases, Auctions, Sales, Deaths and Culls > Sale Catalogue. The sale catalogue is basically the same as the Animal Summary report, but with options to include your own logo, lot number and comments for each animal.
- **To print a Animals Removal Certificate, Document of Identification and/or Health Declaration**, go to Reports > Purchases, Auctions, Sales, Deaths and Culls > Livestock Removal Certificate, Document of Identification and Health Declaration.
- When animals were sold, hunted, died, stolen or left the herd for other reasons, this should be recorded in BenguFarm GAME to keep your herd list up to date. **Please note:** Do NOT delete the animal records of animals leaving the flock (non-active animals) from BenguFarm GAME, as they may in some way be connected to other animals in the database. If an animal is deleted, the pedigree or progeny of the related animal(s) will no longer be complete.

- **To create a list on which animals' sale-/hunting-/death data can be recorded**, go to Reports > Animal Lists and Numbers > Herd List. To the far right are columns to record the date and reason why animals left the herd.
- **To record** (or edit/delete) **sales data** (to whom sold, date sold, reason for selling, weight, price, etc.) **of sold animals or animals that left the herd for reasons other than sold** (e.g. died, stolen, etc.), go to Movements > Sales, Deaths and Culls. Use the **Help** function if necessary.
- **Please note:**
 - When animals leave the herd (sold, died, stolen, etc.), DO NOT just make the animals' status non-active, as afterwards there will be no record of why or when they left the herd.
 - When an animal has left the herd, they are NOT removed automatically from the camp and/or group(s). If you do want to remove the animals from the camp and/or group(s) they were in when they left the herd, this can be done, but this is not necessary as you normally only work with the active animals in a camp or group.
 - If a breeding bull is sold or died, remember to remove the Breeding/AI Bull mark from the bull's record. [Animals > Add and Edit Animals > General > Breeding/AI Bull].
- **If the buyer is also a BenguFarm user, you can send the buyer the relevant animals' data electronically which he can then import into his BenguFarm.** To create this electronic file containing the data of the sold animals, go to Data Send/Import > Send > BenguFarm Animal Transfer File. Use the **Help** function if necessary. **Please note:**
 - If data from more than one species has to be sent, make sure you create a separate Animal Transfer File for each species. The following data is *not* included in the Animal Transfer File:
 - Camps and groups
 - Vaccinations, Dosings, Disease Tests, Diseases and Treatments
 - Procedures
 - Purchases and Sales
 - Photos and Documents.
- **To create a report of animals that were sold or that left the herd for other reasons**, go to Reports > Purchases, Auctions, Sales, Deaths and Culls > Sales, Deaths and Culls.
- **To create a report of the animals which were added to the herd** (calves born, animals bought, moved from another herd) **and left the herd** (sold, died, moved to another herd, etc.) for a specific period, go to Reports > Animal Lists and Numbers > Animal Numbers Reconciliation. **Please note:**
 - For this report to reflect the correct numbers and display all relevant values, it is necessary that all applicable data such as animals born, purchased, moved from another herd, sold, died and moved to another herd recorded with, where applicable, the purchase price, selling price and loss value must have been recorded.
 - To see the start and end totals, the option "Between Two Saved Animal Numbers Dates" should be selected.
- **To view the sale data of an animal on the main window**, go on the Animal Layout to the General view window and scroll down to the sale data fields or go on the Herd Layout to the Sales and Deaths section. **Tip:** Remember to turn on the Non-active filter to see the animal in the list of animals.
- **To restore an animal that was wrongly recorded as sold or dead**, go to Animals > Add and Edit Animals (Single Animal Layout). Turn on the Non-active filter and select the animal in question. On the General Data screen, change the Status to Active. On the Miscellaneous Data screen, remove the Cancelled record and Save. On the same screen, click on Edit Detailed Transfer / Cancellation Record. The Sales, Deaths and Culls screen will now open and the animal's record will be automatically loaded. Select the record and click Delete and Save.
- **Tip: To create a report of all activities recorded in BenguFarm during a selected period**, go to Reports > Administration > Log of Recorded Activities.

30. Move animals to another herd

Please note: If BenguFarm Game is set up with one herd per species (as recommended), the moving of animals between herds is not applicable.

- **To create a new herd (species)**, see paragraph 9.
- How to move animals in BenguFarm from one herd to another herd, depends on whether the two herds are in the same database or in different databases. **Tip:** To see if the respective herds are on the same database, go to File > Change Active Herd To > List All and Select.

- **If the two herds are on the *same* database**, you can simply move the animals from one herd to another. Go into the herd **from** which you want to move the animals to Movements > Move Animals to Another Herd. Mark the animals involved in the "S" column, and then select at the top of the window, the herd **to** which the animal must be moved, enter the date, select the reason and Save. Use the **Help** function if necessary. **Please note:** Remember to change the relevant animal's camp and/or management group, where applicable.
- **To create a report of animal movements between herds on the *same* database**, go to Reports > Camps and Herds > Herd Movements.
- **To view the herd movement data of an animal on the main window**, go on the Animal Layout to the General view window and scroll down to the Herd information fields.
- **To create a report of the animals that were added to the herd** for a certain period (animals born, purchased, moved from another herd) **and left the herd** (sold, died, moved to another herd), go to Reports > Animal Lists and Numbers > Animal Numbers Reconciliation. **Please note:**
 - For this report to reflect the correct numbers and display all relevant values, it is necessary that all applicable data such as animals born, purchased, moved from another herd, sold, died and moved to another herd recorded with, where applicable, the purchase price, selling price and loss value must have been recorded.
 - To see the start and end totals, the option "Between Two Saved Animal Numbers Dates" should be selected.
- **If the two herds are each on a *separate* database**, you must transfer the animals through an Animal Transfer File. Go into the herd **from** which you want to move the animals to Data Send/Import > Send > BenguFarm Animal Transfer File, select the animals concerned, select the transfer options and create the Animal Transfer File. Note where the file is saved. To import the Animal Transfer File into the other herd (on another database), go into the herd **to** which you want to move the animals to Data Send/Import > Import > Database > BenguFarm Animal Transfer File. Browse to where the file was saved and click on Import. Use the **Help** function if necessary.

Tip: To **move animals between camps or other groups**, go to Movements > Move Animals to another Camp or Group. Use the **Help** function if necessary.

31. Update the programme:

- It is important to always update your BenguFarm programme to the newest version (the version date appears at the top of the main window, e.g. "BenguFarm (TM) [GAME] **v7 November 2025**"). BenguFarm users are notified by e-mail when a new version has been released on the BenguFarm website www.bengufarm.co.za.
- **There are three ways to update your BenguFarm programme via the internet** to the newest version:
 - If you are on-line and the automatic update option is selected (Settings > Herds > Reminders > Automatically check for Newest BenguFarm Update), BenguFarm will remind you when a new update is available. Follow the instructions to update your BenguFarm.
 - To initiate the above process manually, go in BenguFarm to File > Update from Web and follow the instructions.
 - Close your BenguFarm, go to the BenguFarm website www.bengufarm.co.za > Updates and download and install the update. The instructions how to do this are available on the website page.
 - If Windows gives you a "Discard" or "Keep" option when starting to download the update file, select "Keep" and the "Keep Anyway". If your computer still does not allow you to download the file, deactivate your computer's anti-virus temporarily and try again. Once the download has completed, the self-extracting zip file must be run. Select "Run" from the "Download Complete" dialog. (The download complete dialog is displayed by the web browser once the file download has completed). Windows may give a security warning and ask the user whether the file must be run or not. Select "More Info" and/or "Run" / "Run Anyway" to run the update file.
- When you have finished the update process, open BenguFarm again and see if the applicable version's date appears on top of the main window, e.g. "BenguFarm (TM) [GAME] **v7 November 2025**".
- **Tip:** To see what has been added and changed in BenguFarm, go to www.bengufarm.co.za > Downloads > Newsletter. Select the latest newsletter and look for the What's New section.

32. Renew the registration of the programme:

Your BenguFarm programme will annually warn you about a month before your BenguFarm license is about to expire. BenguelaSoft BK will send you an invoice for the license fee about a month before your BenguFarm license is about to expire. If for some reason you didn't receive an invoice (please ensure that we have your correct e-mail address), please check your Junk Mail folder and if it is also not there, please contact Philna Moulich at 051 4100 910 or send her an e-mail to registration@benguelasoft.co.za.

To re-register your BenguFarm, follow these instructions:

- Please send the proof of payment of the license fee to Tim Pauw at accounts@benguelasoft.co.za.
- For the automatic re-registration function in BenguFarm to work, the following must be in place:
 - Your computer must be online on the internet at the time that you open BenguFarm;
 - Your BenguFarm module's license fee must be paid up;
 - The license fee payment must be recorded on the BenguFarm client database (please allow 5 working days for this); and
 - Your BenguFarm account number (BPU....) must be recorded in your BenguFarm. (If your account number is recorded, it will be displayed next to your account name at the top of the main window).
 - The relevant BenguFarm Computer Identification Code (at the top of the registration window) must already be recorded on the BenguFarm client database.
- If all this is in place and your BenguFarm registration has expired or is about to expire soon, your BenguFarm will, when you open it, link via the internet to the BenguFarm client database at BenguelaSoft and automatically renew your BenguFarm registration. A message "Re-registration successful. You have access until [date]" will appear on the screen. In such cases, it is not necessary to enter the new registration codes manually on the registration screen.
- Irrespective of the automatic re-registration option, BenguelaSoft will in any case send you, within five working days from date of receipt of payment, an e-mail with the registration and access codes for the Computer Identification Codes (CICs) we have on record for you (see note below). If the automatic re-registration was unsuccessful, go to Options > Registration and complete the registration code and access code for the specific CIC on the registration window and click Register/Reregister.
- **If the automatic re-registration was unsuccessful, and the CIC is not included in the e-mail or SMS or if you do not have an e-mail facility**, please contact Philna Moulich at 051 4100 910 or send her an e-mail to registration@benguelasoft.co.za while you are on the registration window, and supply her with your BenguFarm account name and number (beginning with BPU) and the CIC for which you need a registration code. She will then supply you with a registration code and access code which you need to enter on the registration window. Then click on Register/Reregister.

Please note:

- Please make sure that we have your correct e-mail, phone number and other contact details on record. If you are on-line on the internet, you can check and, if necessary, change your account details via BenguFarm by going to Options> View/Update my Account Information. Alternatively, please contact Philna Moulich.
- Each database in BenguFarm has a different CIC. Also, the CIC of each computer on which BenguFarm is installed is different. Therefore, you will need to supply the CICs of all the databases on all the computers on which BenguFarm is installed and get a registration code and access code for each. To get the CICs of the other databases, change the active herd to the applicable database (File > Change Active Herd to) and then go to Options > Registration. Do the same for each computer on which BenguFarm is installed.

SECTION C – ADDITIONAL AND ADVANCED FEATURES:

File

33. Recalculate summary data:

- To recalculate summary data, go to File> Support > Recalculate Summary Data.

34. Recalculate expected calving dates:

- Expected calving dates must be recalculated if the Youngest Age at 1st Mating, Rest Period from Calving to Mating or Minimum, Normal or Maximum Period Pregnancy settings [Settings > Herds> Mating, Pregnancy and Calving] have been changed for the affected herd.
- To recalculate expected calving dates, go to File > Support > Recalculate Expected Calving Dates.

35. Recalculate automatic diary:

- To recalculate automatic diary entries, go to File > Support> Recalculate Automatic Diary Entries.

36. Recalculate inbreeding percentages:

- To recalculate inbreeding percentages, go to File > Support> Recalculate Inbreeding Percentages.

37. Find duplicate animals:

- BenguFarm will not normally allow duplicate animal records (animals with the same ID No) to be created, but when an animal record was created by hand or imported from some file and then also imported from another file, it is possible in certain circumstances that duplicated records may arise.
- **To search for animals with the same visual or electronic ID number (EID)**, go to File > Support > Find Duplicate Animals. **Please note:** Animals with duplicate numbers are searched for across all herds in the applicable database. Use the **Help** function if necessary.
- If there are animals in the *same herd (species)* with the same ID number, this can lead to several problems. If there are really two animals with the same ID number (e.g. one purchased and one self-bred), add a letter at the back of one of the animal's number to make the animals' numbers unique, e.g. 190022A and 190022B.
- **To create a report of duplicate animals**, click on Display Report.
- **To consolidate the most important data** (general animal data, pedigree data, progeny data, weights, etc.) **of duplicate animal records into one animal record** (i.e. copy from the animal record to be deleted to the one to be retained) **and then to delete the other animal record**, use the Help function for step-by-step instructions.

38. Change ID numbers and/or names:

- **Please note:** It is strongly recommended that a backup of the relevant database be made before using this feature.
- Go to Settings > Herds > ID Methods and Numbering and make sure the Default ID Format is set up correctly.
- Go to Animals > Edit Animals (table layout). At Select Columns to View, select the fields HDM, Year, Sequence Number and, if applicable, Prefix (Flock Name). Make sure these fields, where applicable, are filled in and correct for ALL active animals in the herd concerned, as the first three fields will be used to recreate the ID Nos according to the Default ID Format setting. If anything has been added or changed, click Save.
- To change animals' ID numbers and/or names in BenguFarm GAME, go to File > Support > Change ID Numbers and/or Names and select the appropriate option and choose whether the changes should be made only for certain animals [Change for Selection of Animals] or for all animals [Change for All Qualifying Animals].

39. Administrative functions:

- BenguFarm has various administrative functions to correct or change data. Go to File > Support > Administrative Functions. Your BenguFarm agent will refer you to these functions when needed and provide you with the password to access these functions. **Please note:** It is strongly recommended that a backup is made of the relevant database before any administrative function is used.

40. Troubleshooting and problem solving:

- If you encounter an error message in BenguFarm GAME (e.g. "An unhandled exception has occurred..."), the following should solve it in most cases:
 - Go to File > Support > Test Data Structures and DBNull Values.
 - Go to File > Support > Compact and Repair Database.
 - Go to File > Support > Recalculate Summary Data. Select the option All Animals without Summary Information and click Calculate.
 - Go to Settings > Herds > General and make sure that all applicable settings are in place and correct.
 - Close BenguFarm and open it again.
- If the above steps do not solve the problem, go in BenguFarm to File > Update from Web OR close BenguFarm, open your Internet browser and go to www.bengufarm.co.za > Downloads > Updates. Download the latest update, install it and open BenguFarm again.
- If this still does not solve the problem, contact your BenguFarm GAME agent.

Animals

41. Notes:

- **To record** (or edit/delete) **a general note** (e.g. "Half-sister of most expensive bull at National Sale 2012") **on a record of an animal**, go to Animals > Add & Edit Animals (Single Animal Layout) > Miscellaneous Data > Notes or at Animals > Edit Animals (Table Layout) > Notes. **Notes can also be recorded on the Animal Layout of the main window on the Notes view window.** This is the *only* view window where data can be entered and saved. (Click on the "stiffy" disk icon to save the new note).
- Notes can be included in the Animal Summary report [Reports > Animal, Pedigree and Progeny > Animal Summary]. Notes can also be included in My Reports [Reports > My Reports > Animal Data. Click on Report Columns (Layout) and then select General > Notes].
- **To record a note that pertains to the herd as a whole**, go to Other Data > Herd Notes. Herd notes can be viewed on the Animal Layout of the main screen on the Herd Notes view screen.

42. Appearance remarks:

- **To record** (or edit/delete) **appearance remarks** (e.g. Left horn broken) of an animal, go to Animals > Add & Edit Animals (Single Animal Layout) > General > Appearance Remarks or at Animals > Edit Animals (Table Layout) > Appearance Remarks. Select the remark(s) under the relevant section and mark it (e.g. under the Horns section > Left horn broken). **Appearance Remarks can also be recorded and saved on the Animal Layout of the main window on the Notes view window under the Appearance Remarks heading.**
- Appearance Remarks can be included in the Animal Summary report [Reports > Animal, Pedigree and Progeny > Animal Summary]. Appearance Remarks can also be included in My Reports [Reports > My Reports > Animal Data. Click on Report Columns (Layout) and then select General > Appearance Remarks].

43. Family lines:

- **The purpose of recording family lines** is to indicate that an animal was bred from a specific family. Records can be kept of either dam lines or sire lines.
- **To set whether the program should keep record of dam lines or sire lines**, go to Settings > Herds > Matings, Pregnancy and Calving and select Breed Dam Lines or Breed Sire Lines and, if applicable, Force Selected Line. If Breed Dam Lines is selected, a calf will receive the family code of the dam. If the dam does not have a family line, the calf gets the family line of the sire. Sire lines just the other way around. If Forced Selected Line is selected and for example Breed Dam Line was set up and the dam does not have a family code, the father's family code will NOT be used.
- **The family code can be recorded for an animal** on the Calving screen, Add and Edit Animals screen as well as the Edit Animals screen.
- **On the calving screen, a calf will be automatically linked** to the dam's family line, if the dam's family line has been recorded, or the sire's family line, if the sire's family line has been recorded.
- **To view an animal's family code on the main screen**, go to the Animal Layout > Birth > Family Code and on the Herd Layout to the Birth section.
- **Animals from a specific family line can be selected** with the Choose Animals screen> Choose Animals by Group(s) / Filter(s) > Family Line.
- **The family code can only be included in the My Reports** by going to Reports > My Reports > Animal Data. Click Report Columns (Layout) and then choose Birth > Family Line.

44. DNA verified parentage and bloodlines:

See paragraph 24 how to certify the DNA verified parentage of animals in BenguFarm.

45. Data navigator:

- The **Data Navigator** window is very useful to display various types of data together on one window for the entire herd (default option) or a selected group of animals. Changes to data and removal of records can also be made on the applicable data window via the Data Navigator window. **Tip:** The Data Navigator window can also be used to select and sort animals and to quickly print a report. It is indeed a very useful window. Use the **Help** function if necessary.

46. Search animal:

- **To search for an animal on ID number or another number** (e.g. microchip/electronic number, computer number, DNA number, Genomic number, etc.) or part of a number in BenguFarm GAME, go to Animals > Search Animal. This feature is especially handy to see what the ear tag number was when an animal has lost its visual tag.

47. Re-assign an electronic ID number (EID) to a different animal:

- **PLEASE NOTE:** This feature is specifically for use by cattle, sheep and goat farmers where electronic number discs (EIDs) are attached externally to the ears of animals. It is therefore normally NOT a function that will be used in game, where microchips are implanted subcutaneously.
- **To re-assign the number of a microchip (EID) that was assigned to an animal to a new animal** in BenguFarm GAME, go to Animals> Re-assign Electronic ID Number (EID) to a Different Animal.
- Select the applicable animal and enter the Electronic ID Number (EID) to be assigned to the animal. The animal that currently has this Electronic ID Number (EID) will be listed below and the Electronic ID Number (EID) will automatically be deleted from that animal, i.e. after the relevant Electronic ID Number (EID) was entered at the new animal and saved, the Electronic ID Number (EID) field for the previous animal will be blank. If necessary, a different Electronic ID Number (EID) can be entered for this animal, but it's unlikely, as a re-assignment of a microchip usually happens where the animal that currently has the chip, was slaughtered or sold.
- **Please note:**
 - BenguFarm do NOT keep record of the previous animal(s) that had a particular Electronic ID Number. If you want to keep such records, we suggest that you leave the Electronic ID Number with the previous animal, but add a character to it to make a unique number, e.g. the first animal that had the Electronic ID Number 123456789 is 123456789-**A**, the 2nd animal that had this Electronic ID Number (EID) 123456789-**B**, etc. The animal that currently has the Electronic ID Number is of course only 123456789.
 - If you *only* use electronic identification (EIDs), please see Settings > Herds > Create ID No (Visual) from EID (Electronic ID Number) where no ID No Specified.

48. Electronic ID Number (EID) history:

- **To look up the EID history of a specific EID number or the history of the EIDS of a specific animal**, go to Animals > Electronic ID No (EID) History.

49. Scan and search EID:

- **To scan an EID with an EID reader so that BenguFarm can search for the animal(s) to which the relevant EID is linked**, go to Animals > Scan and Search EID.

50. Change breeders, owners and/or keepers:

- To change one or several animal's breeders, owners and / or stands BenguFarm, go to Animal> Change Breeders, Owners and / or Keepers. Use the **Help** function if necessary.

Reproduction:

51. Semen Tests / Breeding Soundness tests:

- **To record (or edit/delete) semen test results**, go to Reproduction > Semen Tests. Use the Help function if necessary [still to be developed].

- **To look up a bull's last semen test results on the main screen**, go to the Semen Test lookup screen on the Animal Layout. **Tip:** If the tab for Semen Test cannot be found, go to Display and under the Select Main Screen Animal Layout Lookup Screens check the box for Semen Test.
- Note: A report on semen test results is still to be developed.

52. Synchronisation: (if applicable)

- **Make sure the applicable values are set up** at Settings > Herds > Mating, Pregnancy and Calving for # Days from Insert to First Injection; # Days from Insert to Second Injection; # Days from Insert to Remove and # Days from Remove to AI / Lapa.
- **To create a list of all breedable heifers and cows**, go to Reports > Reproduction > Breedable Heifers and Cows (recording list).
- **To record (or edit/delete) synchronisations as well as subsequent actions**, go to Reproduction > Synchronisation. To record additional / follow-up actions data to existing records, click Load Existing Records.
- **To create a report on synchronisations as well as subsequent actions**, go to Reports > Reproduction > Synchronisation. **Please note:** Actions already done are displayed in normal font; actions that still need to be done are shown in bold and actions that should already have been done are shown in bold red.
- **To view synchronisation data of an animal on the main screen**, go to the Animal Layout to the Mating and Pregnancy History view screen (the Show Synchronization option at the top right of the view sub-screen must be enabled) or on the Herd Layout to the Sync section.

53. Unknown calvings:

- This window is used to create calf records where no calf data is available, for example where it is impossible/impractical to record calvings but want to keep a record of animals that are likely to have calved, based on having been tested positive for pregnancy. Calves will be created only for cows and heifers that have been tested for pregnancy and are pregnant.

54. Update Birth Data of Mother-Upped Calves:

- This screen is used to update the birth dates of the last mother-upped calves. At the same time, you can choose to automatically update the sires of the calves based on the mating history of the dams.

Production

55. Measurements and Scores of other traits (not horn measurements):

- **Please note: To record horn measurements**, see paragraph 27.
- **To create a list on which measurements or scores of various traits can be recorded**, go to Reports > Production > Measurements and Scores (recording list).
- **To record (or edit/delete) measurements or scores** (e.g. Condition Score or General Appearance Score) **of traits**, go to Production > Weights, Measurements and Scores not Linked to a Test > Measurements and Scores. **Please note:** Only measurements or scores with numeric values can be recorded here. To record traits with alpha values, see paragraph 76.
- To set up additional traits, go to Settings > Traits.
- **To create a report of measurements or scores**, go to Reports > Production > Measurements and Scores Report.
- **To view an animal's measurements or scores on the main window**, go on the Animal Layout to the Measurements and Scores view window. To display measurements and scores on the Herd Layout, go on the main window's Herd Layout to Display Options > click the Set Up My Columns to Display (icon at the top).
- **To include measurements and scores** set up on the main screen's Herd Layout at Set Up My Columns to Display (see item above) **on My Reports: Animal Data**, go to Report Columns (Layout) > My Columns at the bottom of the list. **Please note:** Saved My Reports layouts containing My Columns will, for technical reasons, not be filled with data.

Movements

56. Traceability:

- **BenguFarm is certified as compatible with the RMIS Traceability System.** As a prerequisite, you need to enter your RMIS Personal Access Token (PAT) at the top of the BenguFarm RMIS Traceability Integration Window. RMIS has a guide with instructions on how RMIS clients can obtain their PAT. A link to the guide is available at bengufarm.co.za > Contact > Links > RMIS Traceability Platform.

- To create RMIS traceability transfers and animal transfer group(s) for a specific transfer as well as how to receive transfers and animals, go in BenguFarm to Data Send/Import > RMIS Traceability. Use the Help function for step-by-step instructions on how to use the screen.
- The Help function in BenguFarm gives guidance on how to use this function. We made the guide available for download on the BenguFarm website. The RMIS guide can be downloaded at: [https://bengufarm.co.za/images/Manuals/RMIS Personal Access Token Instruction Guide.pdf](https://bengufarm.co.za/images/Manuals/RMIS_Personal_Access_Token_Instruction_Guide.pdf).

57. Move animals to another place:

- **To record** (or edit/delete) **the (temporary) movement of animals from the farm to another place (keeper)**, e.g. a bull testing centre, go to Movements > Move Animals to Another Place. Use the **Help** function if necessary.
- **Please note:** To **move animals between herds** (e.g. stud to commercial), go to Movements > Move Animals to Other Herd. To **move animals between camps** or other groups, go to Movements> Move Animals to another Camp or Group.

Health

58. Tests for diseases and parasites:

- **To create a list on which tests for diseases and parasites can be recorded**, go to Reports > Diseases, Injuries, and Treatments > Disease and Parasite Tests (recording list). [Not available yet]
- **To record** (or edit/delete) **the results of disease and parasite tests**, go to Health > Disease and Parasite Tests.
- **To create a report of the results of disease and Parasite tests**, go to Reports> Health > Disease Tests.
- **To view an animal's results of disease tests on the main screen**, go on the Animal Layout to the Vaccinations, Dosings and Disease/Parasite Tests > Disease and Parasite Tests view window. To display disease tests on the Herd Layout, go on the main window's Herd Layout to Display Options > click the Set Up My Columns to Display (icon at the top). [Not available yet]

59. Vaccinations, dosings, dip and supplements:

- **To record vaccines, remedies, dips and supplements stock**, see paragraph 58.
- **To create a list of animals in a specific camp that has *not* been vaccinated**, go to Reports > Health > Vaccinations, Dosings, Dips and Supplements. On the left, select the criteria of the vaccinations that have been done, e.g. between two dates. On the right, select the appropriate camp. Then select the option "Not Vaccinated/Received Remedy or Supplement."
- **To create a list for recording inoculations, dosings, dip and supplements**, go to Reports > Health > Vaccinations, Dosings, Dip, Supplements & Procedures (recording list). In Select Items to Print, select the vaccinations/dosings/dip/supplements to be recorded and add it with the arrow pointing to the right to the Items to Print on Report. **Tip:** To print the dosage (as set up at Health > Vaccines, Remedies, Dips and Supplements Stock), check the Print Vaccine/Remedy Dosage option.
- **To record** (or edit/delete) **vaccinations, dosing, dip and supplements**, go to Health > Vaccinations, Dosings, Dip and Supplements. Use the **Help** function if necessary.
- **Tip:** Information such as **default dosage, withholding period and expiry date** of vaccines, remedies, dips and supplements can be recorded on the stock register [Health > Vaccines, Remedies, Dips and Supplements Stock]. When Vaccinations, Dosings, Dips and Supplements are recorded, the cost per animal will be calculated automatically from the Vaccines, Remedies, Dips and Supplements Stock, provided the batch number is entered. If a batch number is not entered, the last purchase's unit price (total price / # units) will be used.
- **To create a report of vaccinations, dosings, dip and supplements done**, go to Reports > Health > Vaccinations, Dosings, Dip and Supplements.
- **To view the vaccinations, etc. data of an animal on the main window**, go on the Animal Layout to the Vaccinations and Dosings view window. To display it on the Herd Layout, go on the main window's Herd Layout to Display Options > click the Set Up My Columns to Display (icon at the top).
- **To include vaccinations and dosings** set up on the main screen's Herd Layout at Set Up My Columns to Display (see item above) **on My Reports: Animal Data**, go to Report Columns (Layout) > My Columns at the bottom of the list. **Please note:** Saved My Reports layouts containing My Columns will, for technical reasons, not be filled with data.

- **Tip:** It is recommended that, where necessary, the default list of vaccines, remedies, dips and supplements be expanded with specific drugs that you use. This can be done by going to Settings > Vaccines, Remedies, Dips and Supplements. Vaccines, remedies, dips and supplements in the default list that do not apply to your herd can be disabled by removing the tick mark in the In Use and Device (e.g. the MOBILE app) columns.

60. Diseases, injuries and treatments:

- **To record medicine stock**, see paragraph 59.
- **To record** (or edit/delete) **diseases, injuries and treatments**, go to Health > Diseases, Injuries and Treatments. Use the **Help** function if necessary.
- **Tip:** Information such as **default dosage, withholding period and expiry date** of medicines can be recorded on the stock register [Health > Medicine Stock]. When Treatments are recorded, the medicine cost per animal will be calculated automatically from the Medicines Stock, provided the batch number is entered. If a batch number is not entered, the last purchase's unit price (total price / # units) will be used.
- **To create a report of diseases, injuries and treatments**, go to Reports > Health > Diseases, Injuries and Treatments.
- **To view the diseases, injuries and treatments of an animal on the main window**, go on the Animal Layout to the Diseases and Treatments view window. To display it on the Herd Layout, go on the main window's Herd Layout to Display Options > click the Set Up My Columns to Display (icon at the top).
- **Tip:** It is recommended to, where necessary, extend the default list of medicines with the specific medicines you use. This can be done by going to Settings > Medicines. Medicines in the default list that do not apply to your herd can be disabled by removing the tick mark in the In Use and Device (e.g. the MOBILE app) columns. The same applies to the Diseases, Injuries and Parasites settings. Items marked in the "Test" column of the Diseases list will appear in the list on the Disease Tests screen.

61. Vaccines, remedies, dips and supplements stock:

- **To record** (or edit/delete) **vaccines, remedies, dips and supplements** (such as multimineral or multivitamin) **stock** (optional), go to Health > Vaccines, Remedies, Dips and Supplements Stock. Use the **Help** function if necessary.
- When vaccinations, dosing, dip and supplements records are recorded, the vaccines, remedies, dips and supplements stock is updated automatically.
- On the Diary and Management Calendar screen under the Stock near Expiry category, a warning will appear if the relevant batch of vaccine is near the expiry date.

62. Medicine stock:

- **To record** (or edit/delete) **medicine stock** (optional), go to Health > Medicine Stock. Use the **Help** function if necessary.
- When treatment records are recorded, the medicine stock is updated automatically.
- On the Diary and Management Calendar screen under the Stock near Expiry category, a warning will appear if the relevant batch of medicine is near the expiry date.

Feeding

63. Feed and lick stock:

- **To record** (or edit/delete) **feed and lick stock**, go to Feeding > Feed and Lick Stock. Use the **Help** function if necessary.
- **To create a report of** Feed and Lick Stock, go to Reports > Feeding > Feed and Lick Stock. [To be developed]

64. Feed and lick put out per camp:

- **To record** (or edit/delete) **feed and lick put out per camp or kraal**, go to Feeding > Feed and Lick Put Out per Camp. **Please note:** Feed and lick put out per camp are not linked to the animals in the specific camp at that time.
- **Feed and lick stock** (see above) are **automatically updated** if the put out of it in camps are recorded at Feed and Lick Put Out per Camp, *provided* the appropriate stock item is selected and the amount recorded.
- **To create a report of feed usage per camp**, go to Reports > Feeding > Feed and Lick Put Out per Camp.

Other data

65. Rhino horn register:

- **Please note:** This feature is only available if the relevant herd is setup with species as White or Black Rhino.
- **To keep a register of rhino horn that was cut off,** go to Other Data > Rhino Horn Register.
- **To create a report of the rhino horn register,** go to Reports > Other Reports > Rhino Horn Register. [Currently not yet available].

66. Diary and management calendar:

- BenguFarm GAME has an internal diary that is integrated with the management calendar function.
- **To set up your own management calendar,** go to Settings > Management Calendar Settings. Use the **Help** function if necessary.
- **To view the management tasks and other diary entries,** go to Other Data > Diary and Calendar Management. Use the **Help** function if necessary.
- At Settings > Herds > **Reminders** you can set the diary and integrated management calendar to be displayed when BenguFarm GAME is opened (by default it is enabled) and set the period (default is 7 days) for diary items to be displayed.
- **Please note:** When calves' birth data is recorded on the Calving window, BenguFarm will normally automatically calculate the weight dates for performance testing for the relevant calves and display it in the BenguFarm diary.

67. Procedures:

- The Procedures screen is intended to record activities or procedures such as calves weaned, hooves cut, biopsies taken, semen tests, sheath washing, disease tests, animals marked, etc.
- **To create a list on which procedures can be recorded,** go to Reports > Diseases – Prevention and Treatment > Vaccinations, Dosing, Supplements and Procedures (recording list). At Select Items to Print, select the procedures you want to record and add it with the arrow pointing to the right to the Items to Printed in Report.
- **To record** (or edit/delete) **procedures,** go to Other Data > Procedures. Use the **Help** function if necessary.
- **To create a report of procedures,** go to Reports > Other Reports> Procedures.
- **To display the procedures of an animal on the main screen,** go on the Animal Layout to the Procedures view screen. To display it on the Herd Layout, go on the main window's Herd Layout to Display Options > click the Set Up My Columns to Display (icon at the top).
- **Tip:** It is recommended to, where necessary, extend the default list of procedures. This can be done by going to Setting > Procedures.

68. General Herd Expenditures and Income

- See paragraph 65, section Expenditures recording in BenguFarm for recording expenditures per animal or per camp.
- **To record** (or edit/delete) **general herd expenditures** (e.g. labour, diesel, WRSA fees, etc.) **and income for the particular herd,** go to Other Data > General Herd Expenditures/Income. Use the **Help** function if necessary.
- **To create a report of general herd expenditures for the particular herd,** go to Reports > Herd Analysis > General Herd Expenditures/Income.
- **To create a report of all income and expenditures recorded for the particular herd,** go to Reports > Herd Analysis > Herd Income and Expenditure Summary.

69. Rainfall:

- **To import historical rainfall data from Excel,** see Appendix A.
- **To record** (or edit/delete) **rainfall** (per location), go to Other Data > Rainfall. Use the **Help** function if necessary.
- On the same screen a **report** (with various options) **can be created of rainfall.**

70. Miscellaneous stock:

- **To record** (or edit/delete) **miscellaneous stock** (e.g. water troths, feed troths, bale containers), go to Other Data > Miscellaneous Stock. Use the **Help** function if necessary.

71. Camp activities:

- **To record** (or edit/delete) **activities linked to a specific camp** (e.g. burned, de-bushed, feeding place moved, fence maintenance, roads graded, drinking place cleaned), go to Other Data > Camp Activities. **Please note:** Camp activities are not linked to the animals in the specific camp at that time.
- **To create a report of camp activities**, go to Reports > Camps > Camp Activities.

72. Animal sightings:

- **To record** (or edit/delete) **animal sightings on a specific date and camp and/or GPS coordinates**, go to Other Data > Animal Sightings.
- **To create a report of animal sightings**, go to Reports > Animal Lists and Numbers > Animal Sightings. **Tip:** With the Animal Sightings vs Camp option, all the animals seen are listed, and next to each animal the camp in which it is currently in BenguFarm. With the Camps vs. Animals Sightings option, all the animals that are in BenguFarm in a certain camp(s) are listed and next to it in which camp and when they were last seen.

73. Insurance:

- **To record** (or edit/delete) **insurance data** of animals, go to Other Data > Insurance.
- **To create a report of insurance data**, go to Reports > Other Reports > Insurance.

74. Awards:

- **To record** (or edit/delete) **awards of animals**, go to Other Data > Awards.
- Awards can be displayed in the following reports:
 - Breeding Herd Selection [Reports > Inspections and Selections > Breeding Herd Selection]
 - **My Reports [Reports > My Reports > Animal Data > Columns > Awards]**
- **To view the awards of an animal on the main screen**, go on the Animal Layout to the General view screen and scroll down to the Awards fields.

75. Herd Notes

- **To record general notes that pertain to the herd *as a whole***, go to Other Data > Herd Notes.
- **To view herd notes**, go to the Herd Notes view screen on the Animal Layout of the main screen.

Reports

76. My animal data reports:

- The **My Animal Data Reports function is very powerful to set up your own customised reports** and save them for later use. Go to Reports > My Reports> Animal Data.
- Click at the top of the screen on **Choose Animals (Criteria)** and then at the bottom on Choose Animals with Choose Animals Window **OR** set up criteria to select animals by clicking the "+" bottom right of the screen. Use the **HELP** function if necessary.
- Click at the top of the screen on **Report Columns (Layout)** and select under the relevant section the fields you want to include in the report.
- Click at the top of the screen on **View Report** to see how the report will look like. If you want to sort the animals on a specific field, click on the column heading.
- Click at the bottom right of the screen on **Display Report**. Choose Print or Export.
- To save the criteria and/or the layout for future use, click at the bottom of the screen on **Save Criteria and Layout**.
- To load saved criteria and/or layouts, click at the bottom of the screen to **Load Criteria and Layout**.
- **Tips:**
 - On the Report Columns screen, empty columns can also be selected to record, for example, comments or notes.
 - On the My Reports> Report Columns (Layout) in the column Heading of Column on Report, the default column headings can be changed with custom headings. The newly selected column headings can be saved with the "stiffy" icon at the bottom right of the screen.
 - The saved criteria can be used on the main window's group filter as well as on the Choose Animals screen to select animals that meet the criteria.
 - The My Animal Data Reports can be used to set up your own layout for certain reports, e.g. Animals per Camp or Group, Herd List, Pedigree or Progeny Summary.
 - Remember to make a backup of your own reports' layouts. [File > Backup and Restore> Backup My Saved Report Layouts].

- The My Animal Data Reports have certain limitations in terms of the columns available to include in a report. Another option is to create a report on the main window's Herd Layout with the required columns. To do this, see paragraph 7.

77. Herd Analysis:

Averages and trends:

- The purpose of the Averages and Trends report is to graphically compare the average measurement/calculated value of a selected trait(s) for the herd concerned for a selected period. This function can also be used to compare sires' progeny averages.
- **To create an Averages and Trends report**, go to Reports > Herd Analysis > Averages and Trends. Use the **Help** function if necessary.

Expenditures recording in BenguFarm:

- It is recommended that costs and prices be recorded *without* VAT.
- **Stock purchases:** The *total* purchase price can be recorded on the following screens:
 - Health > Vaccines, Remedies and Supplements Stock.
 - Health > Medicines Stock.
 - Feeding > Feed and Lick Stock.
 - Other Data > Miscellaneous Stock.
 - Reproduction > Semen Stock.
- **Expenditure per animal:** Certain expenditures can be recorded in BenguFarm per animal. The following expenditures can be recorded per animal on the following screens:
 - Reproduction > Matings > Artificial Inseminations. **Please note:** The straw cost per animal AIed is calculated automatically from the Semen Stock, provided the Semen Type is selected as Frozen on the AI window and the purchase price was recorded on the Semen Stock window.
 - Reproduction > Pregnancy Tests.
 - Reproduction > Embryo Implants. **Please note:** The cost per animal is *not* automatically calculated from the Embryo Stock.
 - Health > Disease Tests.
 - Health > Vaccinations, Dosing and Supplements. **Please note:** The cost per animal is calculated automatically from the Vaccines, Remedies, Dips and Supplements Stock, provided the batch number is entered. If a batch number is not entered, the last purchase's unit price (total price / # units) will be used.
 - Health > Diseases, Injuries and Treatments. **Please note:** Provision is made for the recording of both veterinarian and/or medicine expenditures. The medicine cost per animal will be calculated automatically from the Medicines Stock, provided the batch number is entered. If a batch number is not entered, the last purchase's unit price (total price / # units) will be used.
 - Other Data > Procedures. Expenditure for procedures (e.g. fertility tests, DNA analyses, ear tags, etc.) that are done per animal can be recorded here.
 - Movements > Purchases. Costs at purchase not included in the purchase price (e.g. transport costs) can be recorded in the Cost per Animal field.
 - Movements > Sales Deaths and Culls. Costs at sales not included in the sale price can be recorded in the Cost per Animal field.
- **Expenditures per Darting Event:**
 - Other Data> Arrow Data: The veterinary costs as well as the helicopter / game capture costs, if applicable, can be recorded if a veterinarian visit is set up.
- **Expenditure per Camp:** Certain expenditures (e.g. lick put out, camp de-bushed, camp burned, fences erected, etc.) cannot be recorded per animal, but it can be recorded per camp. Considering the number of animals in the camp, an average cost per animal can be calculated. This type of expenditure per camp can be recorded on the Camp Activities screen [Other Data > Camp Activities]: **Please note:** If the item concerned, e.g. winter lick, was recorded at Miscellaneous Stock *and* the relevant stock item selected on the Camp Activities screen, the expenditure will be calculated automatically. Otherwise, the expenditure can be recorded on the Camp Activities screen.
- **Expenditure per Herd:** Certain expenditures (e.g. labour, fuel, breeders' society fees, etc.) cannot be recorded per animal or per camp but can be recorded as general expenditures for the herd concerned. These types of expenditures can be recorded on the General Herd Expenditures Screen [Other Data > General Herd Expenditures]. **Tip:** If you have more than one herd on the same database, general expenditure can be recorded in the ALL herd, where applicable. Expenditures that can be recorded per animal (e.g. fertility tests,

pregnancy tests, DNA analyses) but not being recorded per animal, can be recorded here as a total expenditure for the relevant herd.

Herd Income and Expenditure Summary:

- The purpose of the Herd Income and Expenditure Summary report is to calculate the income and expenditure for the herd per item for a specific period (e.g. for a financial year).
- **To create a Herd Income and Expenditure Summary report**, go to Reports > Herd Analysis > Herd Income and Expenditure Summary. **Please note:** Stocks purchased (see above) will *not* be shown as an expenditure on this report. It will only be shown as expenditure if its use was recorded per animal, camp or herd.

Data Send/Import

78. Send electronic EID reader files:

- This function is used to create an electronic file with the visual ID Number (VID) and electronic number (EID) combinations of relevant animals for the purpose of loading these numbers onto the EID reader via the relevant EID reader software (e.g. Tru-Test Data Link). Once this has been done, it enables the relevant EID reader to display the animal's VID when the relevant animal's EID is scanned.
- This feature is currently only available for the Tru-Test SRS2, Tru-Test XRS2, Agrident APR500, Agrident APR600, Allflex 450, Allflex 650 and Agrident AWR300 readers.
- **To create an electronic file with animals' visual ID Number (VID) and electronic number (EID) combinations**, go to Data Send/Import > Send > Electronic ID Reader Files. Note: Only animals with EIDs on record in BenguFarms will be included in the file.

79. Synchronise BenguFarm MOBILE:

See the BenguFarm Mobile manual for instructions on how to set up users, sync data, etc. On that screen is a link to download the Mobile manual from the BenguFarm website.

Settings

80. My animal fields:

- You can define your own fields if you want to record data for which there is no provision elsewhere (e.g. Eye Pigment Percentage). To setup these fields, go to Settings > My Animal Fields.
- To record data in these fields, go to Animals > Edit Animals (Table Layout) **OR** go to Animals > Add & Edit Animals (Single Animal Layout) > My Fields.
- To view data recorded in these fields on the main window, go on the Animal Layout to the My Fields view screen. To display it on the Herd Layout, go on the main window's Herd Layout to Display Options, select the appropriate field(s) under the My Columns section, and click Save Options as Herd Default. Close and re-open BenguFarm, then go on the main window's Herd Layout to the My Columns section.
- My Fields can only be included in the My Animal Reports by going to Reports > My Reports > Animal Data. Click on Report Columns (Layout) and then select My Fields.

Options

81. View and update my account details:

- **To check your BenguFarm account information online**, go to Options> View My Account Details.
- This screen can also be used to request the latest license invoice if you have not received or have lost it.
- **Please note:** This feature only works if the computer is online, the BenguFarm account number (BPU) is recorded in BenguFarm and the account number and the relevant database's Computer Identification Code are recorded on the BenguFarm admin system. If your computer does not allow you to connect, de-activate your computer's anti-virus program temporarily and try again.
- **To update your BenguFarm account information**, please contact Philna Moulich at 051 4100 910 or send her an e-mail to registration@benguelasoft.co.za. Supply her with your BenguFarm account number and the info that should be changed.

82. Action Keys

- The purpose of action keys is to quickly insert certain info that is used frequently, e.g. your herd's herd designation mark letters, when an animal is searched by ID number. Suppose your herd's herd designation mark letters are ABC. You can then set these letters as an action key.

- **To set an action key**, click on the "+" at the bottom right of the Define Action Keys screen, enter the relevant letters (e.g. ABC) in the Value to Display column, select an F key (e.g. F2) in the Key column and Save.
- When an animal's number has to be entered, press the Function (Fn) and the relevant F key (e.g. F2) on the keyboard at the same time. In the example above, the ABC will then be typed.

83. Empty database:

- This feature is used only in exceptional circumstances to empty a database. Your BenguFarm agent will refer you to this function when necessary and provide you with the passwords to access this function. **Please note:** It is strongly recommended that a backup is made of the relevant database before this function is used.

Add-Ins

84. None.

Help

85. Teamviewer remote support:

- The BenguFarm agents use TeamViewer software to provide online support directly to your computer.
- If you do not have TeamViewer software on your computer, you can download and install it from www.teamviewer.com. If during installation you choose "Personal" at type of use, use of the program is free.
- If Teamviewer is installed, it can, when required for online support, be opened directly from BenguFarm on the main screen at Help > Teamviewer Remote Support.
- To update the Teamviewer software to the latest version, click Download Latest Teamviewer.

86. Quick Links:

- This screen provides links to the most used functions in BenguFarm. This is especially helpful for new users to quickly find a function in BenguFarm.

Appendix A

Import CSV format / Excel data

What data can be imported?

With this feature certain animal data recorded in an Excel file, can be imported into BenguFarm. This feature is specifically for herds that cannot import data from another source (e.g. Logix).

To see a list of all the data which can be imported from Excel into BenguFarm, see the table at the end of Appendix A.

Very important:

- **If new animal records should be created** from the imported data, at least the following data should be imported: Animal ID No, Sex, Date of Birth, Species Code and Status Code. If the exact date of birth of the animal is unknown, choose an approximate date, for example 01-10-2018 for animals born in 2018.
- **If the data is to be added to existing animals' data**, the relevant animals' ID No and/or EID in the csv file must be exactly the same as on BenguFarm.

Steps to prepare and import the data:

NB: First make sure the "List Separator" and "Decimal Symbol" settings in Windows is correct. Go to Control Panel > Region > Additional Settings > List Separator. The "List Separator" should be a comma ",". If it is a semicolon ";", change it to a comma ",". The "Decimal Symbol" should be a point ".". If it is a comma ",", change it to a point ".". Click Apply and OK.

1. Preparation of data to be imported:

- 1.1. Create a separate Excel file for each species (herd).
- 1.2. For each animal in the herd (cows, heifers, calves and bulls) of which you want to import data into BenguFarm GAME, you should ensure that all the **available data** (e.g. Animal ID No, Date of Birth, Sex, Dam ID No, Sire ID No) is in the same Excel file and sheet. If you need to **import data from more than one sheet**, it should be ensured that the Animal ID No and Sex is exactly the same on all sheets to prevent that duplicate animal records are created when importing the additional data for existing animals into BenguFarm.
- 1.3. Except for the column headings, remove all lines which do not contain animal data, e.g. blank lines, summaries, etc.
- 1.4. For data where there can be **more than one record for a specific type of data** (e.g. weights recorded on more than one date), each additional record (e.g. weigh date and weights) should be created on a separate line in the Excel sheet to import all the records.
- 1.5. Ensure that the **dates** in the Excel file are stored in one of the following two formats, viz. dd/mm/yyyy or yyyy/mm/dd. E.g. 30 Nov 2010 should be stored as 30/11/2010 or 2010/11/30. The "/" can be any character, e.g. "-". You can use Excel's Cell Formatting functions to change incorrectly formatted dates. This should correct the dates' format, depending on how the dates were originally entered into Excel. If a date is not specified or is not in the correct format, those dates will be created/changed as 01/01/1980 when the data is imported.
- 1.6. For the dam and sire to be correctly linked to an animal, the **ID No of the dam and sire** must EXACTLY match their ID numbers where these animals are listed in the file as animals. (Small letters will automatically be converted to uppercase). If a dam or sire is not listed as an animal, an animal will be created with default values. **If the dam or sire are unknown**, simply leave the applicable field in the Excel file empty.
- 1.7. To import animal **Status** (A = Active – Alive in herd or na = Non-Active - Dead/Sold/Not in herd), **Species, Sub-species, Bloodline, Colour and Appearance Remarks**, the applicable Status, Species (e.g. SBL for Sable), Sub-species (e.g. SSB for Southern Sable), Bloodline (e.g. MSI for Matetsi) and Remark codes should be recorded in the Excel file and match the **codes** in BenguFarm. For a **list of species, sub-species and bloodline codes**, go to Settings > Herds > General and Settings > Sub-species or Bloodlines.
- 1.8. To import **camps, management groups, vaccinations**, etc., the particular item should already be set up in BenguFarm (Settings > [applicable item]). In the Excel file to be imported, the applicable items' codes should match the **codes** in BenguFarm.

1.9. Horn Measurements:

- 1.9.1. The **unit** in which the horn measurements are recorded in the Excel file must match the trait's unit as set up under Settings > Traits per Species (choose the unit per trait applicable to this species in the left-hand list).
- 1.9.2. **All fractions must be converted to decimals** ($1/8 = 0.125$; $2/8 = 0.250$; $3/8 = 0.375$; $4/8 = 0.500$; $5/8 = 0.675$; $6/8 = 0.750$; $7/8 = 0.875$) and the **decimal point**, not comma, should be used.
- 1.9.3. **The horn measurements in the Excel file should *not* include the inch sign (").**
- 1.9.4. For data where there can be **more one record for a specific type of data** (e.g. horns measurements recorded on more than one date), each additional record (e.g. measurement date and measurements) should be created on **a separate line in the Excel sheet** to import all the records.
- 1.10. **There may be no commas in any fields. All decimals should be points and in the notes field there may not be any commas.**
- 1.11. Replace all ` symbols (if any) with ` (left of the 1 on the keyboard).
- 1.12. **Calculations** (such as age, inter-calving period and horn growth) cannot be imported – it will be calculated in the program after the data has been imported, provided the necessary data for the calculations is available.
- 1.13. Save the Excel (xls or xlsx format) file in **CSV (Comma Delimited) format**. To do this, open the file in question in Excel, go to File > Save As... and select File Type "CSV - Comma Delimited" format and click on "Save". If there is more than one sheet in the Excel file, each sheet must be saved in a separate CSV file and imported separately, since you can only save one sheet in a CSV file.
- 1.14. Open the CSV file in Notepad (not Excel) and **check the following**:
 - 1.14.1. The List Separator is a comma (,) not a semicolon (;). If necessary, the List Separator setting can be changed at Computer > Control Panel > Regional > Additional Settings > List separator.
 - 1.14.2. Ensure long numbers (especially DNA numbers) were not converted into exponent format when saving the file in CSV format.
- 1.15. Make a note in which **line/row in the CSV file the data starts**. For example, in the first row there can be column headings.

Example of data format for importing new animals into BenguFarm:

ID No	Sex	Date of Birth	Species	Status	Camp	Dam	Sire	Horn Length Left	Measure Date
130124	M	15-10-2013	SBL	A	K1			11.5	01-08-2014
140020	F	01-10-2014	SBL	A	K1			12.0	03-08-2015
150001	F	01-10-2015	SBL	A	K1			10.75	03-08-2016
150002	F	01-10-2015	SBL	A	K1			11.0	03-08-2016
150025	F	01-10-2015	SBL	A	K1			13.25	03-08-2016
160011	F	03-09-2016	SBL	A	K1			12.5	15-08-2017
160036	M	27-09-2016	SBL	A	K1			11.0	15-08-2017
160036								23.5	20-07-2018
160123	F	11-11-2016	SBL	A	K1			10.5	15-07-2017
170001	F	01-09-2017	SBL	A	K2	140002	130124	13.0	02-08-2018
170002	F	03-09-2017	SBL	A	K2		130124	12.5	02-08-2018
170003	F	05-09-2017	SBL	A	K2		130124	11.75	02-08-2018

2. Import the data from the CSV file into BenguFarm:

- 2.1. Go in BenguFarm to the specific herd (species) for which you want to import data.
- 2.2. **Go to Data Send/Import > Import > Database > Open File Format (CSV)**. [Use the Help function if necessary].
- 2.3. Click on "Browse" in on the top of the window and **choose the csv file** of the specific species you want to import.
- 2.4. Import options:
 - 2.4.1. At "Data Start on Line #" **choose on which line in the csv file the data starts**. (Column headings should not be imported).
 - 2.4.2. Choose the applicable import options. If unsure, keep the default options.

- 2.4.3. If additional data needs to be imported into existing animal records, the relevant animal's ID No and/or EID and sex in the csv file must be exactly the same as on BenguFarm. To prevent duplicate animals from being created, uncheck Create Animal if it Does Not Exist under Import Options. Click on "Browse" on the top of the window and **choose the csv file** of the specific herd you want to import.
- 2.5. **Specify what data is stored in what column in the CSV file.** To do this, click on the "+" at the bottom of the window. Now click *below* the column heading "Data Stored in this Column". A list of all the data which can be imported are now displayed. Choose the data that is stored in column 1 (or column A). Repeat this for all the columns you want to import. If you don't want to import a specific column's data, choose the option "skip – do not import".
- 2.6. In "**Sex, Male=**" in the "True/Yes" column (far right) fill in what is in the **sex** column in the csv file for male animals, e.g. "M". Only the animals with "M" in that column will be imported with sex as male, the rest automatically as female.
- 2.7. Check that all the columns you want to import have been specified correctly. If all is correct, click on "**Import**".
- 2.8. Please note that **animal names** are changed to capital letters when the data is imported.
- 2.9. **If the animal records are imported for some reason incorrectly**, then the incorrect records must first be removed before the data can be imported again. The data can be removed as follows:
- 2.9.1. Go to Animal > Edit Animals (Table Layout)
- 2.9.2. Click on Load a New Selection of Animals (top right of the window), switch on the Non-active filter (right on top of window) and select all the applicable animals which should be deleted. (Use the Help function if necessary).
- 2.9.3. Click Remove records (right below on the window) and save.

Data that can be imported from a CSV file into BenguFarm

Identification: - Animal ID No (visual) - Animal ID No (Remove bracketed information) - Electronic ID Number (EID) - QR ID - Registration number - Animal ID (officially) - Animal Name - DNA No - Scale Number - Traceability Number - RGD No General Animal Data: - Birth Date - Sex, Male = - Status (code) - Animal Alive, Yes = - Herdmark - Year (of Birth) - Sequence Number - Sire ID No - Sire EID No - Sire Breed (code) - Dam ID No - Dam EID No - Dam EID No - Dam Breed (code) - Recipient Cow ID No - Birth Date Uncertain, Yes = - Calving Season (code) - Birth Status (Single, Twins, Triplets) (code) - Mating Type (code) - Colour (code) - Colour Split (Yes/No) - Horn Status (code) - Family Line - Species (code) - Sub-species (code) - Section - Not for registration - Groups (kode) - Notes - Microchip Place Implanted - Microchip Date Implanted - Appearance Remarks (code) - Breeder - Owner - Book value - Market Value Inspection Data: - Inspected, Yes = - Inspection Date - Inspector	Approved, Yes = Visual Score Rejection Reason (kode) Genomic Results Data: - Myostatin Test Date - nt821 Castration Data: - Castrated, Yes = - Castration Date Camp Movement Data: - Camp (code) - Date moved - Reason moved (code) Veterinarian Visit Data: - Veterinarian Visit Date - Veterinarian Name Disease and Parasite Tests Data: - Date Tested - Tested for - Positive, Yes = - Titer/Count Diseases & Treatments Data: - Date Ill - Veterinarian Name - Illness/Injury (code) - Medicine/Treatment (code) - Remark Vaccinations, Dosing, Dip and Supplements Data: - Date Vaccinated - Vet Name - Vaccinated Against (code) - Vaccine (code) - Dosage - Cost - Remark Manure Samples & Internal Parasite Data: - Date Samples Taken - Parasite Species (code) - Parasite Count (# Eggs / gram) - Remark Tooth Data: - Dentation Type (code) - Number of Teeth - Teeth Condition (score) Matings: - Calving Season (code) - Mating Type (Nat=1; AI=3; EI=4) - Semen Type (code) - Sexed Semen - Bull ID No - Bull 2 ID No - Multi Sire - Date In - Date Out	Pregnancy Data: (Females) - Testing Date - Pregnant Yes = - Period Pregnant - Period Type [(W)eeks / (M)onths] - Cycle (code) # Fetuses (1, 2, 3) (code) Weights: - Birth Weight - Dam Weight at Calving Scoring Data: - Score Date - Condition Score - Temperament Score Body Measurements Data: - Body Measurements Date - Measurement Code - Measurement Value - Shoulder Height - Hip Height - Hump Height - Head Length - Ear Length - Scrotum Circumference - Pelvic Height - Pelvic Width Front - Pelvic Width Back RTU Measurements: - Measurement Date - Rump Fat Depth - Rib Fat Depth - Eye Muscle Area - Marbling Horn Measurements and Other Data: - Horn Measurement Date - Horn Length Left - Horn Length Right - Horn Base Circumference Left - Horn Base Circumference Right # Horn Rings Left # Horn Rings Right - Horn Tip Length Left - Horn Tip Length Right - Horn Tip-Tip Width - Ring 1-10 Distance - Horn Wear Left - Horn Wear Right - Horn Boss Width Left (Buffalo) - Horn Boss Width Right (Buffalo) - Horn Outside Spread (Buffalo) - Horn Inside Spread (Buffalo) - Inner Tip-Tip (Buffalo) - SCI Tip-Tip Length - SCI Index - Front Horn Length Front (Rhino)
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		Front Horn Length Rear (Rhino) Front Horn Circumference (Rhino) Rear Horn Length Front (Rhino) Rear Horn Length Rear (Rhino) Rear Horn Circumference (Rhino) Number of Turns (spirals) Horn Spiral Width Horn Drop Left (Buffalo) Horn Drop Right (Buffalo) Horn Boss Circumference Left (BWB) Horn Boss Circumference Right (BWB) # Body Stipes Left (Eland) # Body Stipes Right (Eland) Chevron (Eland) Animal Sightings Data: Animal Sighting Date Seen By Seen in Camp (code) GPS Longitude GPS Latitude Remark Purchase Data: Date Purchased Seller Price Original ID No Date Arrived on Farm Sales, Deaths and Culls Data: Sell/Death Date Sold, Yes = Own Reason for Left Herd (code) Official Reason (code) Sold To Carcass Weight Income Base (code) Dressing Percentage Income per kg Price Carcass Classification Date Left Farm Cost Remarks Rainfall Data: Date Location Amount (mm) Remark
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Appendix B

Calculations in BenguFarm-GAME – Descriptions and General Guidelines for Selection

Trait	Description
General	
Age of Animal	The age of animal is displayed on the main screen as follow: • 0 - 634 days in Days • 635 - 730 days in Months • 731+ days in Years. The age of animal is displayed on the main screen's Horn Measurements view window as follow: • 0 - 3 months in Days • 4 - 24 months in Months • 25+ months in Years
When is calf considered as being weaned?	A calf is considered weaned if a Wean procedure has been recorded (Other Data > Procedures).
Reproduction	
Expected Calving Date	Expected calving date calculations in BenguFarm depends firstly on whether a pregnancy test was done or not for the particular animal: 1. If a pregnancy test was done, the animal was pregnant and the period pregnant was recorded in BenguFarm, the expected calving date is calculated as follows: Testing date MINUS Period pregnant on testing date PLUS Normal pregnancy period (as set up at Settings > Herds > Matings, Pregnancy and calving). 2. If no pregnancy test was done OR a pregnancy test was done, the animal was found pregnant but the period pregnant has not been recorded in BenguFarm, the expected calving date calculation depends on whether matings were recorded in BenguFarm or not: 2.1. If matings were recorded (as is normally the case in cattle and sheep where mating seasons are used), the <i>earliest</i> possible calving date (if selected at Settings > Herds > Matings, Pregnancies & Calving > Calculate <i>First Possible Expected Calving Date</i>) is calculated as follows: The first mating date since the last calving date OR where several pregnancy tests have been done since the last calving date, the first mating since the previous pregnancy test PLUS Normal pregnancy period. 2.2. With the setting "Calculate Expected Calving dates without Mating Data" [Settings > Herds > Matings, Pregnancies & Calving] enabled (it is enabled by default for the GAME module), the expected calving date is calculated without any mating data or pregnancy tests recorded in the program. 2.2.1. For heifers older than "Minimum Age of Heifers at 1st Mating" (Settings > Herds > Matings, Pregnancy and Calving) the expected calving date is calculated as date of "Minimum Age of Heifers at 1st Mating" PLUS the "Normal Period Pregnant". 2.2.2. For cows with days since last calving date more than the "Av. Period from Calving to Mated again" (Settings > Herds > Matings, Pregnancy and Calving) the expected calving date is calculated as the last calving date PLUS the "Av. Period from Calving to Mated again" (if > 0, else the "Ovulation Period") PLUS the "Normal Pregnancy Period". This calculation is displayed on the main window and My Reports (Last Mating - No mating data but expected calving dates), Heifers and Cows Near Calving report, if "Minimum days since last calving (no matings)" is marked (default marked in the GAME module), and the Heifers and Cows Calved/Not Calved" report. This method thus

	calculates the earliest possible calving date. By changing the default "Minimum Age of Heifers at 1 st Mating" and/or the "Av. Period from Calving to Mated again" settings, the expected calving date calculation can be made more accurate.	
Trait	Description	Guidelines for Selection
Age Last Calving (ALC)	Age (in months) when the cow calved for the last time.	Not normally used in selection – only informative info.
First Inter-calving Period (First ICP)	Period (in days) between first and second calving dates.	Cull cows with a high first inter-calving period, taken into consideration when they were mated for the first time and the second time.
Last Inter-calving Period (Last ICP)	Period (in days) between the last two calving dates.	Cull cows with a high last inter-calving period.
Av Inter-calving Period (Av ICP)	Average period (in days) between calvings over all the calving dates.	Cull cows with a high average inter-calving period.
Days Since Last Calving (DSLCL)	The period (in days) since the last calving date.	Cull cows with a high Days Since Last Calving value.
Reproduction Index (RI)	The RI evaluates the overall reproduction performance of a cow, taking AFC and average ICP into account. Please note that DSLCL is, for technical reasons, <u>not</u> considered in the calculation of the RI. Using the RI, cows with different AFC and ICPs can directly be compared, e.g. a cow that calved at 24, 48 and 60 months of age will have the same RI as a cow that calved at 36, 48 and 60 months of age.	Cull cows with a low Reproduction Index.
Horn Measurements		
Contemporaries (Contemp.)	A contemporary group is a group of animals born in the same year and season (thus of similar age), at the same location (same herd or farm), of the same sex, and fed and managed alike from birth to the time of measurement. It is of UTMOST IMPORTANCE that all horn growth indexes (see Reports > Production > Horn Measurements Evaluation) are calculated within a contemporary group (see above).	The number of contemporaries gives an indication of the reliability of the horn growth index calculations: The more the contemporaries, the more reliable the indexes. <u>Please note:</u> Correctly defined contemporary groups are essential for accurate comparison of animal's performance regarding horn growth and future breeding value estimations. Contemporary groups should be defined in such a way that all (or at least all significant) environmental effects are the same for all animals within a particular group.
Horn Growth per Month (inch/ md or mm / month or cm / month)	The average horn growth (in inches, centimeters or mm as set up at Settings > Traits per Species) per month from birth to the time of measurement.	Use the Horn Growth Index for selection - see below.

Horn Growth Index	Horn Growth Index value is calculated by dividing the animal's horn growth per month <i>from birth to measurement date</i> by the average horn growth of the group (contemporaries within gender), expressed as a percentage. A horn growth index of 110 thus means that the animal's horn grew 10% faster than the average of the group in which he or she was compared.	The Horn Growth Index makes it easy to compare animals' horn growth within a contemporary group. To select for animals with above average horn growth, select animals with a Horn Growth Index of above 100 within the particular contemporary group.
Corrected Horn Length	Currently Corrected Horn Length in BenguFarm-GAME is only calculated for Sable. The user can select to which age (e.g. 365 days) the horn length should be corrected (or projected). The Corrected Horn Length makes it possible to compare animals' horn lengths at the same age.	To select for animals with above average horn length, select animals with a Horn Growth Index of above 100 within the particular contemporary group.
Horn Growth between measurements (inch/ md or mm / month or cm / month)	The average horn growth per month from the previous to the current measurement. This calculation is only available on the Horn Measurements view screen on the main window. To enable this option, go to Display > Horn Measurements View Screen Options.	
Body Measurements		
Adjusted Scrotum Circumference (Adj. SC) Adjusted Scrotum is not yet calculated in BenguFarm-GAME.	Scrotum circumference is an indirect evaluation of testes volume. Larger testes are associated with a larger volume of semen production and also, to a lesser extent, with higher quality of semen.	Cull bulls with low (10% or more below average) Adjusted Scrotum Circumference (e.g. herd average = 340mm – cull bulls with an Adjusted Scrotum Circumference below 315mm).

Appendix C

Contact details

For enquiries and assistance with regards to BenguFarm GAME, please contact your **assigned** agent.

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BenguFarm agents use **Teamviewer software for remote (Internet) support**. Teamviewer can, if installed, be opened from BenguFarm on the main screen by going to Help > Teamviewer Remote Support. If not installed, Teamviewer can be downloaded and installed at www.teamviewer.com. If you need support using Teamviewer, open your Teamviewer (make sure your Internet connection is turned on) on Remote Control, contact your BenguFarm agent and provide your Teamviewer ID and password to him/her.

Training courses and individual training

BenguFarm GAME users are notified by e-mail BenguFarm News of the dates, places and other details when training courses are organised. His information is also put on the website www.bengufarm.co.za > Training.

For individual or small group (1-3 persons) or online training, contact your BenguFarm agent or contact Mr. Leslie Bergh at 082 801 2026 or e-mail bengufarm@gmail.com or Mr. Johan de Jager at 083 305 1042 or e-mail jjager@mweb.co.za.