Crush Side Recording Module

The HerdMASTER Crush Side Recording Utility (CSRU) has been designed to allow users who have a laptop at the yards, to not only view previous information but also record new information against animals as they are scanned in the race. You will need an RFID reader and optionally, Electronic scales to be connected to the PC at the yards. Saltbush’s unique Plug and Play system will identify the type of device connected to the system and establish a connection with it. There is also a manual device interface for custom situations or foreign devices. As you scan a tag, the scanned animals previous weights, traits, procedures, preg test info, and basic details will be populated on the screen. You can then record new weights, traits, procedures, preg tests, as well as update basic animal info such as sex or date of birth. Using the Trait and Procedure Template’s users can record virtually any combination of Traits and Procedures against each animal. Also, calculated information such as Average Daily Weight Gain (ADWG) and estimated ADWG is displayed for each animal, and each animal’s weight to assist in drafting and performance monitoring. Sessions can be saved to allow users to record a single session over multiple recording periods, even if they have to shut down the computer due to a low battery to move between yards or any other situation. There is a viewable overview of the unique animals and their weights in the order they were scanned.

Opening CSRU for the First Time

Click on the Crushside Recorder icon on the left of the screen.

When you first open the CSRU you will not have any templates setup for recording groups of Traits and Templates. You will receive two messages indicating this (See images below). If you do not wish to record Traits or Treatments then you can ignore these messages and continue configuring your devices.
Setting up Trait and Treatment Templates

To Setup Trait or Procedure Templates click the Setup Traits or Setup Procedures button. You will be displayed with a Setup Template Headers screen.

CSRU Configuration

The CSRU configuration options are found in the Setup | Site Options section of the program.

- Use Plug and Play (PnP) Devices
- Enable RFID Test Mode
- Duplicate Procedure Mode
- Duplicate Trait Mode
- Record PregTests
• Show Preg Tests
• Allow Manual Induction
• Use Tag Buckets
• Require Sex
• Show Pedigree
• Show Progeny
• Show Matings
• Show Diary
• Enable RFID Test Mode
• Overwrite Mob
• Overwrite Worksheet
• Require DOB
• Show EBV’s
• Require VID when inducting new animals
• Auto-Generate Animal Tag from EID using the last digits
• Require Manual Save before allowing next scan
• Enable Induction Mode by Default
• Use Sounds (Scan Beep)

**Use PnP Devices**
Either enables or disables the Saltbush Plug and Play system. If this is unchecked during a session, you will need to close and reopen the main screen for the change to take effect.

**Enable RFID Test Mode**
This allows a dummy scan signal to be sent to the CSRU for testing purposes. It is only used in a support context, end users should leave this unchecked.

**Duplicate Procedure Mode**
When recording procedures there may be a situation where the same procedure has already been recorded against an animal on the same day. In these situations users can have the program prompt them to see if they wish to add a second identical procedure or they can ‘Always’ add the duplicate procedure or they can ‘Never’ add duplicate procedures.

**Duplicate Trait Mode**
When recording traits there may be a situation where the same trait has already been recorded against an animal on the same day. In these situations users can have the program prompt them to see if they wish to add a second identical trait or they can ‘Always’ add the duplicate traits or they can ‘Never’ add duplicate traits.

**Record PregTests**
Either shows or hides the Preg test recording functionality of the screen. If this is unchecked you will not see the previous preg test info nor will you be able to record new preg test info.
**Show Preg Tests**
Displays a details table that shows Preg test history for the current animal.

**Allow Manual Induction**
When enabled shows an extra button at the top of the main screen that allows users to manually key in an EID, then the program imitates a scan event as if you just scanned the tag you typed in. This is useful if you know an EID but do not have the tag.

**Use Tag Buckets**
If this option is checked, HerdMASTER will assign an NLIS number to the EID you have recorded matching on the tag bucket files you have stored loaded in to HerdMASTER.

**Require Sex**
If this box is checked then a sex will be required in order for you to add new animals to the system.

**Show Progeny**
Enables Progeny tab, displaying current animals progeny.

**Show Pedigree**
Enables Pedigree tab, displaying Pedigree tree information.

**Show Matings**
Enables Matings tab, displaying matings information.

**Show Diary**
Enables Diary tab, displaying diary entries.

**Show EBV’s**
Enables EBV’s tab, displaying EBV information.

**Require DOB**
If this option is checked then a Date of Birth (DOB) will be required before you can create a new animal with the CSRU.

**Auto Generate Animal Tag from EID using the last digits**
This option allows you to generate an Animal Tag from the EID. You have the option in this screen to say how many of the last characters you use.

**Require Manual Save before allowing next scan**
This option will only let you scan the next animal when you have manually pressed the scan button.

**Enable Induction Mode by Default**
Un-checking this option will automatically create a new animal when you scan an EID that is not associated with any animals in your system.

**Use Sounds**
Enables an audible beep when the reader has picked up a tag.

**Changing the Screen Colours to improve contrast**

Users can adjust the colours of the Crush Side Recorder screen to allow for maximum visibility in situations where contrast is required to clearly see screen details, such as at the yards in direct sun light.

**Connecting to RFID and Scale Devices**

To connect a device to the CSRU module you have 2 different options. The first is to connect the devices up to your computer and then press the start button. The CSRU will then automatically try and find the com port you have the devices connected.

If it connects to the devices the buttons will go green if it doesn’t connect the buttons will go red. If it connects to one device one of the buttons will go green for the device it is connected to and the other button will go red.
The second option to connect the devices to the CSRU is to manually tell the computer which port you have the devices plugged in to. To do this you press the configure button and you will then get a screen similar to below.

Select the reader and/or Scales you have and then select the com port you have them connected to. When you have finished press the save button on the right of the screen and press close. You will then be taken back to the CSRU screen. Now you can press the start button and both or one of the buttons should go green depending on how many devices you setup.
**Scanning Animals**

As you scan animals with your connected RFID reader their details will be displayed on the screen.

When a scan takes place HerdMASTER CSRU attempts to locate the animal associated with the EID that was scanned, if there is no animal associated with the scanned tag you will be prompted to select an animal that the tag belongs to.

![Screenshot of unknown animal selection](image)

Select the animal that the tag belongs to and click OK to create the association and return to the main screen. If the animal does not exist in the database you can click the ‘New Animal’ button to create a new animal.

When creating a new animal you must specify a Unique Tag, Sex, DOB, and Breed Code. Once this information has been entered click OK to add the new animal and you will be taken back to the main screen. Once HerdMASTER CSRU knows which animal you just scanned, it will load that animal’s information on the screen.
**Displayed Animal Information**

The Animal Tag and EID are visible in the top right hand corner of the screen, these fields are read only.

The Weight field will contain the weight if a weight has occurred on the recording date otherwise this will be blank.

The NID is displayed below the EID. Users are able to modify this and the changes will be saved.

The animals DOB, Sex, Sire and Dam are displayed below the weight textbox. You can edit these fields by ticking the ‘Allow Animal Edit’ checkbox and specifying new values. To set or change a Sire or Dam make sure the ‘Allow Animal Edit’ box is ticked and then click the field you want to update (either Sire or Dam). The ‘Allow Animal Edit’ checkbox will un-tick itself when you save or scan the next animal.

The Days since weighed displays the number of Days since the animals last weight, the ADWG is the animal’s lifetime average daily weight gain. Both Fields are displayed for information purposes only they cannot be modified.

Any Traits will be displayed in the Traits table, by default this is sorted by Date in ascending order, you can change the sort order by clicking any of the column headings, this table is read-only you cannot modify the contents of this table on this screen.
Any Procedures will be displayed in the procedures table. By default this is sorted by Date in ascending order, you can change the sort order by clicking any of the column headings, this table is read-only you cannot modify the contents of this table on this screen.

Weights are also displayed in the weights table, by default this is sorted by Date in ascending order. The weights Gain and Average Daily weight gain can be viewed for each weight since the last weight and the first weight. You can change the sort order by clicking any of the column headings, this table is read-only you cannot modify the contents of this table on this screen.

Progeny can be displayed in the left details container if you select this option in the CSRU setup. By default this is sorted by Date in ascending order, you can change the sort order by clicking any of the column headings, this table is read-only you cannot modify the contents of this table on this screen.

If you have the Preg Test option enabled you will be able to see the last preg test for female animals on the Last Preg Test area. If the animal is not female this will be disabled, if you do not have the Record Preg test option enabled you will not be able to see this area. To view an animal’s entire Pregtest history you need to enable the show Pregtests option in the CSRU Setup, this will show the Preg Tests details table. By default this is sorted by Date An ascending order, you can change the sort order by clicking any of the column headings, this table is read-only you cannot modify the contents of this table on this screen.
Customising Your Display

The CSRU allows you to change various aspects of the display to make it easier for you to see the information you want or need to see. There are two main features that can be used to make your job easier, the Large Display Panel and moveable detail tables.

The Large display panel is a view option that shows the Animal Tag and Weight in a large and easy to see font. You can toggle between the Large View and the Details View by clicking the buttons located in the top right hand corner of the Animal Details panel. The Animal Tag field font size will automatically reduce depending on the length of the current tag. The maximum characters that can be displayed at once is 12.

Moveable Detail Tables allows you to reorder and move detail tables (Traits, Procedures, Weights and Progeny) from one container to another. The latest release of the CSRU has the ability to view Progeny, this option is disabled by default and must be enabled in the Site Options in order to customise your detail tables. We use a Drag and Drop method to move tables from one container to another. To Move a details table you simply left-click and drag the table header you wish to move over the container you wish to move it to and release your mouse. A container must contain at least one details table. If there is only one details table in a container the ability to move that table is disabled. There are three containers (right, left, and bottom) that you can move your data tables between. The following demonstrates moving the Progeny table from the left container to the right container. This would allow a user to view Traits, Progeny and Weights simultaneously.

**View before Progeny table move**

1) Left click and drag the table you want to move (Progeny)
2) Move the mouse to the desired container (right) and release the mouse button.
3) The Progeny Table will be added to the right container and you will now be able to view the Traits, Progeny and Weights tables simultaneously.
Recording New Information

**Weight:** When an animal has been scanned, if it was already weighed on the recording date this weight will be displayed in the weight textbox, otherwise you can manually enter a weight here or weigh using a scale connected to the computer and it should transfer to this textbox. The Obs Code, Perf Group and Man Group specified next to the weight text box will be recorded with the weight. If this box is left blank no weight will be recorded. NID (CCIA in Canada): This is the animals National ID or CCIA number. You can add or change an animal’s NID or CCIA by overwriting the text in this field.

*Note:* This field will be filled with the current EID automatically if it's empty when an animals is scanned.

**Worksheet:** If you want to add animals to a worksheet as they are scanned, choose a worksheet from the drop down list, or type in the name of a new worksheet. This will not clear as you scan additional animals unless you change it.

**Sex, DOB, Sire and Dam:** You can modify the Sex, DOB, Sire and/or Dam of animals as they are scanned by clicking the ‘Allow Animal Edit’ checkbox and modifying the respective fields. To set a new Sire or Dam, make sure the checkbox is ticked and then left click the respective field. When the next animal is scanned the checkbox will automatically uncheck itself.

**Traits:** If you have a Trait Template selected in the Selected Header Drop Down List you can record the Traits available in that template. There are three options associated with recording Traits.

- [ ] Add
- [ ] Ask
- [x] No Traits

Add will add any Trait that has a value in the value column, Ask will prompt you for each animal if you want to Add Traits to the animal. No Traits will ignore all traits and will not record.

*Note:* If a Trait does not have a value in the Value column it will not be recorded.

If the animal already has the same Trait Recorded on the recording date the value will be updated, ignored or CSRU will prompt you. The action CSRU takes is specified in the Setup option Duplicate Trait Mode.
**Procedures:** If you have a Procedure Template selected in the Selected Header Drop down List you can record the procedures listed in the template table. Similarly to the Trait Template there are three options associated with recording Procedure Templates.

- **Add** will add all Procedures in the template table.
- **Ask** will prompt you to see if HerdMASTER CSRU should record all procedures.
- **No Procedures** will ignore all rows and not record any procedures.

Unlike the trait template if you choose to record procedures ALL procedures in the list will be recorded even if the dose is 0.

If you change the Duplicate Procedure Mode to ‘Always’ or ‘Never’ you will not be prompted in these cases. If you have batches specified in your template and you have chosen to Maintain Inventory, HerdMASTER CSRU will automatically deduct the dose from the specified batches Quantity Left and add it to the Quantity Used. If your batch does not have enough units remaining or it has passed its expiry date you will receive a validation warning indicating the problem and asking if you wish to record the procedure anyway.

**Preg Tests**

If you have Preg Tests enabled you can record basic pregtest information. Choose a Result either positive or negative, if Positive, then supply a weeks pregnant, and then an In-Calf status either Wet or Dry.

The Undo button will discard any new information you have entered and reload the current animal’s details.

The View Current Session button will display a window with a unique list of Animals and their weights if any.