Electronic Identification (eID)

Electronic Identification (eID) is an important tool that is used by Sheepmatters, that helps their clients to identify commercial production (or non-production) in their sheep operation.

Traditionally with manual tags, we could record information against the mob, not practically on an individual basis. Only in sheep studs with the use of manual tags were individual traits recorded (both time consuming and high human error!)

eID enables us to record relevant commercial traits, and make informed decisions, while removing human error.

Essential Tools for eID

RFID Tags

eID is all based around the Radio Frequency Identification tags (RFID). The RFID tag has a unique number only to that tag, in which all information is recorded against. The RFID is basically an electronic number plate that is "woken up" when a reader activates the tag.

There is no information recorded on the RFID tag itself. The information is "housed" in an indicator in which you have collected by activating the electronic number plate, by the use of a reader. (see below)

The RFID's unique number, when activated by a reader, is what all information is "mapped" against and retrieved.

When a RFID tag is put in the animal's ear you can "map" the manual tag number against the "electronic number plate", so that is what you see when activating it on the indicator.

The RFID tag, gives the true sense to the meaning "management tag". On a commercial scale we are turning sheep into individuals and we are recording traits against that sheep, therefore ranking the sheep on performance, not age.

The RFID tag is an essential and affordable tool to collect information against the animal wearing that tag.

Reader

The second part of the eID system are the readers. They are important to identify the unique RFID number, and to either help record information or retrieve information against that sheep.

Readers come as portable (Stick, PDF) or as fixed (Panel)

The reader, in this case a Gallagher HR4 stick reader is used to transfer information from the RFID tag to an indicator.

Indicator

The third part is then what the readers send the unique RFID number to, is an indicator. Indicators can be basic to complex. They can be part of the reader, but are normally separate.

Standalone indicators (Gallagher TSI, True Test XR 3000) are purpose built "computers" in which information can be collected to and also retrieved. These purpose built computers are also capable to be connected to weigh bars, so that the animal weights can be recorded against the animals RFID tag.

Also third party software (Saipan's Koolcollect, Practical System's Stockbook) can be used as indicator with a lap top or tablet computer. Whatever computer is used is connected to a reader via cable or blue tooth. With this system if you wished to weigh animals, the computer would be needed to be connected to an eID capable indicator to transfer the weight from the indicator to the computer.

An indicator is a tool to "store" the information collected from the animals RFID tag and also to bring up historical information.
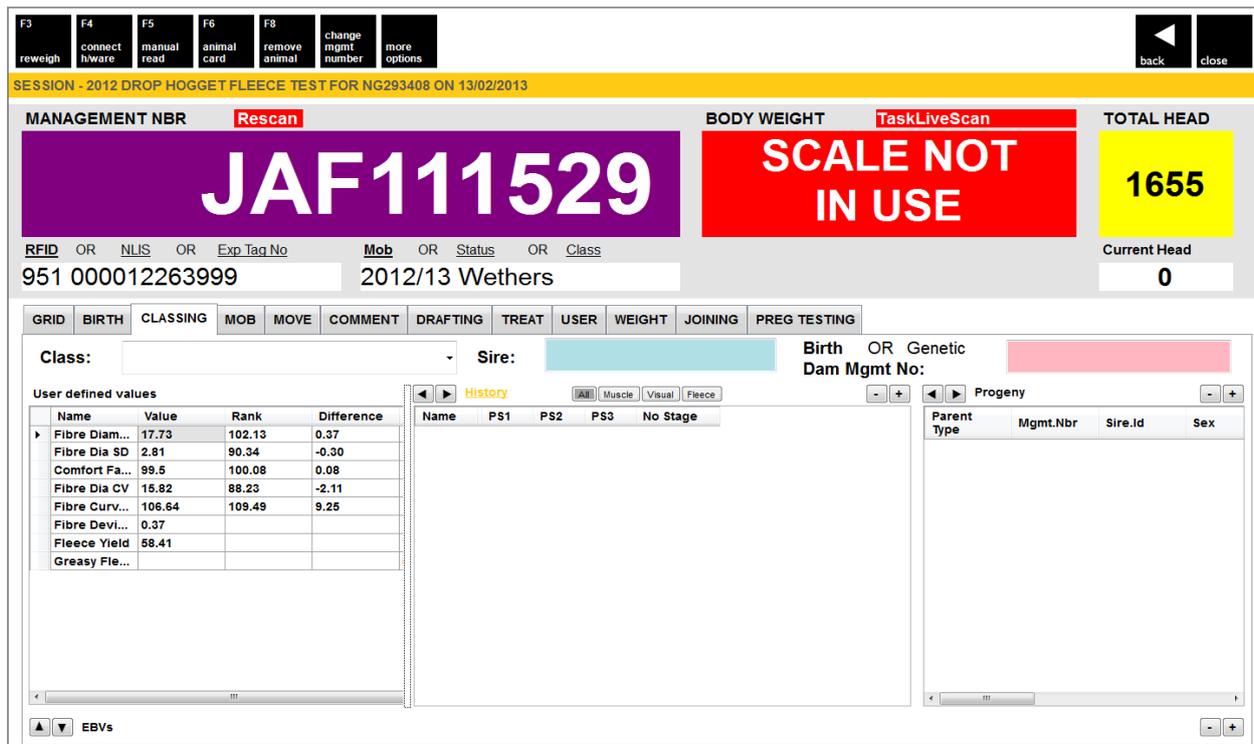
Software

The fourth part is using software to help make sense of the information collected. We can use basic software (excel) to more thorough (Gallagher, Truetest) to more comprehensive (Sapien, Practical Systems)

Excel software is the most basic data software where the user needs to understand how to manipulate the raw information collected, using excels formula systems.

Indicators (Gallagher's TSI and Truetest XR 3000), come with built in software as part of their internal system. With some education and support, these software systems make it an easier journey to manipulate the raw information.

Third party software (Saipan's Koolcollect, Practical System's Stockbook) is purpose built software to manipulate the raw information collected and to comprehensively understand how your animals are performing.

Software such as Sapien's Koolcollect is an exstensive purpose built software program to help the user to make objective informed decisions on their livestock.

Conclusion

The initial investment by Sheepmatters clients in eID is the RFID tag. From there Sheepmatters provides the readers, indicators, software and experience to help collect, manipulate and make decisions on that information collected.

As the clients confidence and understanding grows in eID, then they are slowly investing in the right hardware and software, that will meet there business needs.

By investing in the correct products that suit their requirements, Sheepmatters clients are making smart decisions with both their investment and the decisions they are then making on the sheep.

Contact Sheepmatters if you have any enquiries.

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