

Example eID v Manual Tag - Time Efficiency

This example below is taken from a real operation in May 2013.

On a job that Sheepmatters was involved in, both eID and manual tags were used on 500 ewes in each mob (total 1000 ewes). Information on individual ewe's fertility status at pregnancy scanning (dry, single or twin) was being collected.

The producer wants to compare the time efficiency of using the two different tags.

The pregnancy scanner normally scans 550 ewes an hour, or 11 seconds per ewe, twinning.

The manual tag cost \$0.30 each, eID tag \$1.30 each.

A stopwatch was used to record time for both mobs in yard and office.

The Yard – Recording the Fertility Status Against the Ewe

Identifying pregnancy status in ewes with **manual tags** took **16.4 seconds** per sheep or 137 minutes for the 500 ewes. This was done with one person reading the tag with the ewe in the scanning crate and one person writing down the tag number and the fertility status against the tag number. A number of tags were covered in dirt and grease which made manual reading difficult, and on a number of these tags the person reading the tag wasn't confident it was the correct number. 4 tags were missing.

Identifying pregnancy status in ewes with **eID tags** took **11 seconds per sheep** or 92 minutes for the 500 ewes. This was done with one person scanning the eID tag and recording the pregnancy status. 1 of the 500 eID tags didn't read, so the manual number on the eID tag was recorded into the stick reader with the pregnancy status. 1 tag was missing.

Recording Pregnancy Status - Manual v eID Tags		
Yard		
	Manual Tags	eID Tags
Sheep Number (hd)	500	500
Time Recording (hrs)	2 hr 28 min	1 hr 53 min
Labour units	2	1
Total Labour Time (hrs)	4 hr 56 min	1 hr 53 min
Labour Cost (\$35.00/hr)	\$172.55	\$65.80

The above table shows just the time and therefore the costs associated in recording a pregnancy status with a manual tag vs. an eID tag.

The Office – Data onto a Spreadsheet

Once all information was collected against both mobs, the next step is put it into a spreadsheet against the tag number of the sheep.

With the **manual** recoding it took **1 person to type the 500 tag numbers and individual pregnancy status onto a excel spreadsheet 1 hours and 23 minutes**. Also it was noted that 23 (4.6%) of the tag numbers, that the person wasn't entirely sure that she was entering the correct number and a further 6 (0.02%) numbers were duplicates.

With the **eID** recording the data took a total of **13 minutes to transfer/download onto a excel spreadsheet**. The information downloaded was the pregnancy status, manual tag number and eID number. This included the one eID tag in which the manual number had to be entered due to the tag not working in the yard.

Recording Pregnancy Status - Manual v eID Tags		
Office		
	Manual Tags	eID Tags
Sheep Number (hd)	500	500
Time Recording (hrs)	1 hr 23 min	13 min
Labour units	1	1
Total Labour Time (hrs)	1 hr 23 min	13 Min
Labour Cost (\$90.00/hr)	\$124.20	\$19.80

The above table shows just the time and therefore the costs associated in entering data onto a spreadsheet with manual tag entry vs. an eID tag entry.

The Yard & Office – Combined Time

With information collected from the yard and then the data entered into a simple excel spread sheet in the office, we can now look at the efficiencies of the two different means of collecting and entering data.

Recording Pregnancy Status - Manual v eID Tags		
Total Costs - Yard and Office		
	Manual Tags	eID Tags
Sheep Number (hd)	500	500
Cost in Yard	\$172.55	\$65.80
Cost in Office	\$124.20	\$19.80
Total Cost	\$296.75	\$85.60
Cost per sheep (500 hd)	\$0.59/hd	\$0.17/hd

The above table shows just the **total time involved** and therefore the total costs associated in collecting data in the yard and then entering the data onto a spread sheet in the office, manual tag vs. an eID tag.

So this example must be taken in context, that in this particular operation, it was about **recording time efficiency**.

It is hard to put a cost against the wrong information or no information being recorded against a sheep, as this can result in incorrectly ranking that sheep. A sheep, as an example may be a high performance ewe, but due to incorrect information, she may be put into a mob that is joined to an inferior sire with a result of inferior progeny. So the point is, accuracy is very important.

In summary, feedback from the pregnancy scanner

By **using eID**, the pregnancy scanner didn't need to use spray cans to mark the ewes (dry, single, twin). He said that this is a benefit to him, in both **speed** and **his own health** (as using aerosol cans has in the past caused his nose to bleed, resulting in 2 surgical operations). Also, if after scanning, the sheep go back into one mob (singles and twins), by the time they are ready for pre lamb vaccination treatments (5 to 6 weeks pre lambing), a lot of his clients couldn't tell which ewes were single and which were twins due to the spray fading.

Other obstacles avoided with the use of eID that are present **when using manual ear tags**: The scanner said that his charge is based off a certain number of sheep scanned per hour, so if reading manual tags while in the scanning cage was a common management practice, the scanner would increase the charge per sheep (he didn't say how much). The scanner suggested that as an option to try to avoid additional expense to the producer, after scanning ewes could be put up the race and the manual ear tag numbers could be recorded then, instead in the scanning crate. This suggestion would benefit the scanner, but would mean then double handling of the pregnant ewes.