

## RECORDING IN PIG IMPROVEMENT

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## INTRODUCTION

All pig producers keep records. Few pig producers process their records. Few pig producers keep adequate records. Few pig producers are able to make management decisions based on records.

The only records that need to be kept are those involving actual measurement and those factors that can be clearly defined. "Defects" should not require recording as they would tend to be self limiting.

All recording systems depend upon accurate and positive identification of every animal within the herd. Ear notching, tattooing and ear tagging are common animal identification methods.

All improvement programs are designed to increase the profitability of the farm involved. Those factors most affecting profitability will be the factors chosen for recording and should be given priority in that order.

## FACTORS OF IMPORTANCE

Highest priority should then be "reproductive performance" and "food conversion efficiency". These broad categories divide into:

- \* Boar's fertility
- \* Sow's productivity
- \* Piglet productivity
  - growth
  - FCE
  - fat
- \* Carcass

These factors can be recorded simply using the following data:

- a) Mating
  - date
  - boar ID
  - sow ID
  - comment
- b) Farrowing and Weaning Data
  - date
  - sow ID
  - number of pigs
  - weight
  - comment

- c) Piglet Performance
  - daily live weight gain
  - daily food intake
  - duration of test
  - comment
  
- d) Kill Sheet Data
  - dressed weight
  - fat measurement
  - percent lean meat
  - comment

## RECORDING SYSTEMS

Present methods of recording, and herd sizes relevant to each, are:

<u>Method of Recording</u>	<u>Relevant Herd Sizes</u>
Memory	0 - 10
Pocket dairy	10 - 50
Card index system	50 - 100
On-farm computer	100 +++
Central computer	50 +++

The advantages and disadvantages of each method of recording are:

<u>Method</u>	<u>Advantages</u>	<u>Disadvantages</u>
Memory	Cheap, quick	Inaccurate
Pocket diary	Cheap, portable, accurate.	Requires lengthy processing, diary fits down slats, no index for information retrieval.
Card index system	Cheap, includes some processing, detailed, indexed easy retrieval.	Transposition errors, lengthy file up-date, slow retrieval.
On-farm computer	Fast file up-date, fast and complete processing, fast recall. Capable of including comprehensive data over large numbers.	Expensive, no programs available, not portable; on-farm service?
Central computer	Small capital expense, detailed reports, comparisons with other farms, no on-farm operator required.	High running cost, no access as required, slow response. No operator involvement.

As the capital cost of small computers decreases and the average size of piggeries increases, programs will become more available for the on-farm computer which becomes the obvious record-keeping medium. It has the advantage of recording all the other aspects of farm management at no additional capital cost. Operators using an interactive program will have little difficulty in operating and maintaining the system. Twelve months ago we purchased a mini computer because our record keeping maintenance was becoming an impossible task. There were difficulties. We underestimated the size and complexity of the program required and the time involved in working it up.

### 'CEFN' SYSTEM

Our approach has been to keep the minimum volume of records and in such a way that we can process them extensively. All systems depend on positive identification of every animal and we achieve this with a combination of ear-marks and tattoos.

#### 1. General

Six input options are available:

- a) Entry. This allows for the inclusion in our files of "Outside Animal". It also allows the system to begin.
- b) Mate. Only boar ID, sow ID, date and comment are kept. Comments must be limited to reasonably specific categories.
- c) Very basic data on numbers, weights and comments are included.
- d) Weaning. Dates, weights and identities.
- e) Performance test. Start date/weight, finish date/weight. Food consumed and P2 fat measurement.
- f) Exit (sold, selected, slaughtered or died). ID, date, carcass information where applicable, cause of death where applicable.

#### 2. Data Recall

Available in all forms at any time through the screen and printer.

- a) Files. Sow, boar and litter files.
- b) Histories. Sow, boar, litter and piglet histories are kept complete in every detail. For sows and boars this includes slaughter data averages and performance test averages for all progeny involved. Litter records and pedigrees can also be printed to suit Stud Breeders by simply rearranging the data.

#### 3. Herd Statistics

Includes total number of animals in the Herd listed by categories, births, deaths and marriages, etc. Losses pre- and post-weaning fully reported by categories.

#### 4. Target Report

The opportunity to set targets for numbers born for instance, is offered and then statistics are reviewed by the processor on a pass or fail basis. If fail, then the animals causing the failure are listed so that action can be taken.

#### 5. Performance Test Report

Processes the data collected on test and calculates an index based on a nominated rolling average.

#### 6. Abnormality Reports

Lists scheduled activities not yet completed, i.e. sows weaned but not yet mated, sows beyond 100 days gestation not yet farrowed, piglets beyond 40 days not yet weaned.

#### 7. Identity Interrogation

Allows for question marks to be included in an identity that cannot be accurately read. Processor scans files for animals which could comply and lists.

### FUTURE REPORTS

Food usage (whole herd). Least cost rations. Stock control for food ingredients for the home mixer. Printing of forms to be used in the field to reduce transposition errors.

It is essential to the success of any record-keeping system that it be:

- a) as simple as a pocket diary
- b) provide information on which the Manager can make a quick decision
- c) desk top available.

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