3. Annual Reporting

During August each year, all completed lactations or lactations having reached 300 days are used to produce annual cow production reports for individual herds.

An annual lactation history file is produced at this time and used to produce State and Shire production statistics as well as Relative Breeding Values for all dairy sires having daughters milking during the year.

4. Data Preparation at District Centres

The centralisation of the herd recording procedures has developed over the past five years and currently there are 11 Herd Improvement Centres which control over 70% of all cow production recording and artificial breeding usage. Data preparation at these centres utilizing minicomputers interfaced with testing equipment is currently being investigated. This could reduce the large data entry workload currently borne by the Department of Agriculture. This facility would also promote greater flexibility in operating procedures at these centres.

5. Outlook for 1979/80

A substantial increase in the number of farmers utilizing the dairy herd performance recording scheme is anticipated (estimated in excess of 300,000 cows). The basic data processing and reporting procedures are well established and accepted by the dairy Industry. Hence 1979/80 will see a consolidation of the service offered with improvements in data preparation and usefulness of information, not only to the farmer but also to other interested parties.

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N.S.W. DAIRY HERD IMPROVEMENT PROGRAM: INFORMATION PROCESSING SYSTEM

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SUMMARY

Data processing for the N.S.W. Dairy Herd Improvement Program is currently undergoing extensive revision, upgrading and expansion, as a result of the inadequacy and obsolescence of the present system. Purchase of new hardware by the N.S.W. Department of Services provided an added stimulus to undertake the revision.

Reports from the revised system will be provided for three facets of the Program, viz., herd recording, selection and contract mating of elite cows and the Sire Evaluation Plan.

1. Herd Recording

Herd recording data has two main users - the individual farmer and the industry.

From the revised system, information will be returned to the farmer by means of:-

a) A Production Report following each sampling, which will show details of the latest sampling, the lactation to date and a Current Production Index (CPI) for each cow. The CPI will be calculated on the milk yield and provide a within herd ranking for each cow at each sampling, taking into account breed, age, season of calving or times calved.

b) A Lactation Statement at the end of each cow's lactation, showing all identity details, sire and dam and production on the latest and all previous lactations. The lactation statement will provide at the end of each lactation an updated lifetime production history for each cow of the herd. Calf details will be listed with each lactation if provided at calving.

c) An Annual Herd Summary which will list all cows completing a lactation in a 12 month period, together with the appropriate age group and herd averages. A Production Index (breeding value) will be calculated and cows will be listed in production index order on the summary.

d) A Calf Register - A listing of calves born with details of sire and dam if these are included with the first sample information of the lactation following calving.

e) A Management Action List - An option such that if mating dates are provided, a monthly listing will be provided showing Cows for Service, Cows to Dry Off and Cows to Calve.

For industry, reports will be prepared listing the breeding values of bulls, appropriate annual statistics of herds and cows recorded and production achieved, and factors affecting production. A listing of pedigreed cows recorded Officially will be prepared for publication.

2. Selection and Contract Mating of Elite Cows

Selection of elite cows will be based on the Production Index, taking into account the sire's breeding value and the cow's butterfat test.

A sequential series of reports will be produced depending on the stage of selection and mating. A list of cows for inspection will be first produced after selection.

Following inspection, at which the next anticipated breeding date will be obtained, a conception report will be output to enable collection of mating data. Later, a report to obtain calving data will be produced.

Results of calving will enable a summary table to be prepared for a particular group of cows to monitor losses at each stage and enable predictions to be made of the number of young bulls available for proving in the Sire Evaluation Plan.

3. Sire Evaluation Plan

Proving of groups of young bulls is undertaken in the Sire Evaluation Plan, for the Friesian and A.I.S. breeds, and, with the co-operation of the Queensland Department of Primary Industries, for Jerseys.

Insemination data will be input to enable monitoring of amounts of semen used for groups of bulls, by bull and herd, and distribution between and within herds.

Birth data will be collected with herd recording data, and give information on the available daughters per bull, sex ratios, distribution of daughters between and within bulls and herds, size of calves, any assistance required at calving and any abnormal calves. Complete details of abnormal calves will be obtained manually.

The randomness of the distribution of inseminations and calves available for survey between dams at all stages from insemination to the end of the second lactation of resulting heifers born will be checked, using the Current Production Index or the Production Index of the dam.

Utility characters (temperament, ease of milking, size, dairy character, body capacity, mammary system, fore udder, rear udder, rump, legs and feet) will be scored for daughters two to three months after calving on their first lactation. Ratings for each character for each bull in the proving groups will be calculated for the general characters and for specific defects which will be scored with the utility characters.

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