Cattle identification and milk recording in the Czech Republic

F. Urban

Research Institute of Animal Production, Prague, Czech Republic

The Czech Republic (CR) has been a member of ICAR since 1992 and this membership entitles it to use the signature of the ICAR (authorised in 1994). Methods of milk recording approved by ICAR were respected through the whole period of the existence of the CR. At present, 526,026 cows are milk recorded in the CR, that is 95.6% of all dairy cows. Ninety-two percent of them are classified with the milk recording type A4 and 8% with the type AT according to the directives of ICAR. The average yield of recorded cows (30.06.1998) was 5,073 kg of milk, 4.3% of fat, 219 kg of fat, 3.31% of protein and 168 kg of protein.

A high proportion of milk recorded cows has been common in the CR for a long time. Besides its original function, milk recording serves as a means of animal record keeping and as a crucial source of information for the management of large herds. For this reason the whole system was from the beginning of the 1960s, an integrated one, which included animal record keeping, milk recording and all reproduction data. All data processed in the central computer are mutually connected and are further used as a source of information for farmers, breeding companies and breeders’ associations. In addition, it enables an extensive inspection of reported and registered data.

Within this system (95% cows milk recorded, 99% cows inseminated), all data are transferred by organisations involved in artificial insemination and milk recording into the central data processing unit. There is only one central computer used for the whole population of dairy cows in the CR. It is operated by the company established for this purpose by cattle breeders’ associations (Czech-Moravian Association of Breeders Ltd.). Milk recording and AI data are received from dairy enterprises, in harmony with regulation no. 241/91 Law Digest, by accredited organisations approved by the Ministry of Agriculture of the CR. The Czech-Moravian Association of Breeders also operates all milk analysing laboratories. From the laboratories all data are also transferred into the central processing unit.
At present, in the central computer, data from more than 500,000 cows are kept and processed. In the beginning of the 1960s, data were processed with the help of punch-cards. In the 1970s, an integrated system of milk recording and artificial insemination data processed by a central computer (ECI-1045) was initiated. As its capacity was not sufficient, it was replaced by IBM - Server type RISC 6000. All data are processed in the system UNIX.

The standard of the milk recording method is fully in harmony with the directives of ICAR. It has been developed and issued by the Czech-Moravian Association of Breeders, i.e. with the direct participation of cattle breeders' associations. Milk recording is carried out by accredited organisations. At present, there are fourteen organisations with the legal status of joint stock companies. These organisations have created a net of subsidiaries in all districts and through them they are able to carry out the milk recording on all concerned farms. There are three systems of inspection of milk recording:

- inner inspection system of accredited organisations;
- milk recording inspectors attached to the laboratories of the Czech-Moravian Association of Breeders Ltd.;
- inspection by the Ministry of Agriculture of the CR.

The costs of milk recording are paid by farmers. The annual fee per cow is 240 - 300 CEK, i.e. the price of 30-37 l of milk is dependent on a number of recorded cows, remoteness of the farm, etc. The contribution of the Government to the total milk recording costs is 20%.

During 1998, preparations for the establishment of an overall central cattle register were carried out. The legal ground is the Law of Veterinary Care. The veterinary law thus imposes duties on farmers directed by the EU Council since 1 January 1998 within the whole EU without any exception. Explanation and individual duties of cattle keepers are laid down in the Direction of the EU Council No. 820/97 which determines a system of registration and identification of cattle with respect to identification of beef and beef products. The purpose of this measure is to ensure information on the birthplace and movement of individual animals throughout their life, i.e. from birth to slaughter. After the amendment of the veterinary law is passed, a duty for farmers will be initiated to keep an “Individual Register of Bovine Animal Keepers”, which concerns all categories of cattle. During 1999 a similar system will be established for pigs and later for other farm animals as well.

With regard to the fact that most data have been recorded in the central computer for a long time, the establishment of a central register was relatively easy and was focused particularly on recording of animal
movements both within agricultural enterprises and within or outside the CR. In the autumn of 1998, the system was tested and from 1 January 1999, it will become fully operational.

A uniform system of cattle identification with eartags was established in the CR at the beginning of the 1960s. The numeric series for individual enterprises were allocated centrally. At present, the system of identification with one metal and one plastic tag with the same number is used. The tags and application devices are subsidised by the Ministry of Agriculture and they are provided to farmers free of charge. At their own expense, farmers can use another plastic tag for their own system of identification. This number is not centrally registered. The metal tag is placed into the left ear and the plastic one into the right ear. The Czech-Moravian Association of Breeders Ltd., as the organisation approved by the Ministry of Agriculture to operate the central register in harmony with the Direction of the EU Council No. 820/97, is responsible for the inspection of cattle identification correctness and proper record keeping on farms.

By law, the farmer is responsible for the correct keeping of animal registers by means of the prescribed form “Individual Register of Bovine Animal Keepers”. All farmers receive detailed information on how to keep the register including all types of inspection.