Sheep production in Canada is in serious need of an injection in the arm. The medicine could be a highly prolific breed with a long breeding season to increase the number of lambs marketed per ewe each year, and make sheep raising more attractive economically. Many breeders are presently grading their herds of native breeds with the Finnish Landrace breed, which is known for its high prolificacy. The Romanov is another breed recognized for its high prolificacy. Since there is talk of importing this breed into Canada, the author felt that giving a brief account of the productive potential of this breed and presenting some results on the performance of its crosses with native breeds would help many sheep breeders interested in the Romanov.

The Romanov originated in the Soviet Union in the 18th Century, presumably from a cross between males imported from Silesia in 1720 or Holland in 1764, and females from a local breed. Some Russian scientists claim that the breed was developed by selection over many years of a short-tail Nordic breed and that no foreign breeds were involved. The Romanov takes its name from a small town in the Volga Valley, Northeast of Moscow, not very far away from where the Finnish Landrace originated. Indeed, many scientists believe that the two breeds were from the same origin.

The Romanov animals have the following characteristics:

1) The lambs are born black in colour and then turn gray as a result of a mixture of black and white wool fibres. The males have a mane of long black hair around the neck and down the brisket.

2) The head is small and angular, the poll is round, the ears are upright and mobile. The eyes are voluminous. The males with or without horns, have a more convex forehead than the females and a wider and shorter head.

3) The body is of medium size and the ribs are rounded. The Romanov animal is high on its legs.

4) The tail is short and very characteristically pointed.

5) The average body weight of the mature animal is 50 kg for the ewes and 70 kg for the rams.

Sexual maturity is early in the Romanov — males are capable of mating at three to four months of age; some ewes were reported to have lambed at nine months of age. Well-fed females can reach 40 kg live weight in six to eight months and can be bred at that age. Research work comparing the performance of ewes bred for the first time at different ages (ranging from 6 to 18 months) indicated that adequately-fed ewes, ten or eleven months of age, gave the best performance.

The Romanov breed is characterized by an extremely long season of sexual activity. In many ewes no anoestrous period can be detected at all. This trait is of particular importance to Canadian breeders in view of the extremely short season of sexual activity in Canadian sheep.

Ewes return to oestrus 30 to 40 days after lambing. Because gestation length in the Romanov is a few days shorter (averaging 144 days with a range of 139 to 149 days) than in most other breeds,
it is possible to manage a flock of Romanovs to produce two crops of lambs within 365 days.

In the Soviet Union, the average number of lambs born to 100 ewes ranges from 184 to 320 lambs in the different flocks depending on their condition. In many cases, ewes give birth to seven to nine lambs alive. One ewe was reported to have given birth to 64 lambs in 12 lambings. The high prolificacy of the Romanov results from a higher percentage of ewes producing twins and triplets rather than from few ewes producing exceptionally large litters. For example, in 110,000 lambings averaging 2.15 lambs, 20.2% were singles, 51.3% twins, 24.2% triplets, and only 4.3% over three lambs. In a flock averaging 2.5 lambs the corresponding percentages were: 8 to 8%, 38 to 40%, 44 to 46%, and 8 to 10%.

In France, where management conditions are better than in the Soviet Union, the Romanov gave even better results. In six herds involving about 1400 births, prolificacy was 2.69 lambs for adult ewes and 2.07 for yearlings. In one herd, the average was 3.13 lambs per ewe. The performance of the same ewe is homogeneous in successive litters — a Russian scientist found that the ewes giving birth to one, two or three lambs in their first litter would give an average lifetime production of 1.89, 2.15, or 2.68 respectively.

The average number of reproductive years in the herd is about 7.5 years. Mortality in the adult ewes is estimated at 10 to 11% for ewes kept in confinement, and 3.7 to 7.8% for those kept on ranges in the Soviet Union.

Lamb mortality depends greatly on management and may go up to 50% in badly managed flocks. In the Soviet Union, preweaning mortality in flocks averaging two lambs per ewe ranges from 6.7 to 13.7%. In France, although the preweaning mortality was estimated at 13%, the average number of lambs weaned per ewe was 2.7. Crossbred (1/2 Romanov, 1/2 native) have a 7% preweaning mortality, less than half of that estimated for the native breeds in France.

The Romanov is a good maternal breed. In Russia, the lambs are left with their dams until weaning, and milk production of the ewes for a lactation period of 100 days ranges from 110 to 160 kg with 6.3 to 7.4% butterfat. Maximum milk production is attained at the 15th day of lactation, and is highest in six to seven-year-old ewes. Some lines in the Romanov possess four functioning teats. The better milking and maternal ability of the Romanov is transmitted to their half-blood progeny.

Because the ewes nurse two to three lambs on the average, the growth rate of the lambs during nursing is slower than that for other breeds suckling only one, occasionally two, lambs. In the Soviet Union, average weight at 20 days of age was 5.8 kg; and at three months 16.8 kg. In another study, weaning weight at four months averaged about 19 kg. If feed is supplemented to lambs during nursing, they can grow at the rate of 300 g per day.

Growth after weaning depends on the feeding management. In many studies, the 40 kg weight was attained in six to eight months. In France, the growth of crossbred (1/2 Romanov, 1/2 native) lambs is much higher than in the pure Romanov, especially when the native breed involved is of the meat type.

Dressing percentage varies with age and feeding conditions. In lambs seven to eight months old, a dressing percentage of 48% could be expected. The high priced cuts represent 60 to 70% of the carcass. It is estimated that 80% of the carcass is edible meat.

France is the only Western country in which the Romanov has been imported. Since 1964, when France first imported the Romanov, many crossbreeding experiments have been carried out to evaluate the performance of the Romanov crossed with local breeds under various conditions. The results of these experiments will make the subject of a forthcoming article.