

2. The current trend toward using crossbred females to produce slaughter hogs offers the most promising opportunity to market swine breeding animals in the South. An estimated 90 per cent of the commercial producers raise crossbred hogs for slaughter. Crossbreeding is used to combine desirable characteristics of different breeds and to capitalize on hybrid vigour (or heterosis). Heterosis is defined as the average superiority of the crossbred progeny over the average of its parents. Heterosis occurs when genetically different lines or breeds are crossed and it is greatest for traits with low heriditabilities. Traits such as litter size, litter weaning weight, and survival rate respond best to crossbreeding. Pig survival and growth are the real benefits of a systemic crossbreeding program. Research has shown that about 28 per cent higher 21-day litter weights can be realized per female exposed when crossbred sows are used compared to purebred females. There does appear to be potential to market single cross (F_1) breeding females in the South. It should go without saying that the purebred swine used to develop the crossbred females should be of proven high quality.

The following approaches could be taken in marketing Canadian swine (purebred boars and crossbred females) in the nine Southern states.

1. Georgia, North Carolina, and Tennessee are expected to be the primary users of swine replacements during the next five years. These states should be the major targets for the marketing effort.

2. Advertise and promote the animals in trade publications in the area. Special effort should be put on the target states.

3. Exhibit in the large swine shows in the area; focus on shows located in the states that are the primary target areas.

4. Some of the larger purebred breeders and commercial operators in the area could be invited to tour swine operations in Canada. These tours often lead to business contacts that are beneficial to both buyers and sellers. In addition, breeders from the South could get a personal view of Canadian operations.