

SEXUAL DEVELOPMENT

One of the first evidences of reaction to stilbestrol injections was sexual excitation among both the heifers and cows, the occurrence and frequency of which are shown in Figure 6. In true estrus, cows and heifers in the Station dairy herd seldom manifest much excitement. Animals injected with stilbestrol varied in reaction. Sexual excitation was intense, other animals mounting the individual repeatedly in coital mimicry. The period of excitation persisted even as long as 4 days in an instance, for 3 days in 3 instances and 2 days in 12 instances. Within the lots there was almost continual sexual manifestation during the early period of injections. Rectal examinations of the reproductive organs of selected animals indicated non-function of the ovaries in this period. It was planned to breed the animals 90 days after initiation of lactation to simulate a 12-month calving interval and thereby obtain lactation curves which would be comparable with those from the herd generally. At the end of this 90-day interval most of the animals were quiescent. Six heifers and 1 cow were served a total of 9 times, resulting in only 1 conception. (See Table 5.) It must be borne in mind that most of the 14 heifers were regarded as slow or questionable breeders when selected for this investigation. On this account, the poor history of conceptions cannot be attributed to the stilbestrol. The condition of the reproductive organs at slaughter will be discussed later.

REPRODUCTIVE ORGANS

All animals were examined prior to selection to determine the condition of the reproductive organs. Only non-pregnant animals were chosen. All but 2 of the heifers were considered to be problematical as breeders, based on breeding history. The 2 heifers had been slow to conceive. They had shown estrus shortly prior to their selection but breeding had been withheld purposely for this investigation. Only open heifers were desired, so as to allow a full lactation period of at least 10 months' duration. The condition of the reproductive organs as examined initially is shown in Table 6.

LATER OBSERVATIONS

With the raised tailheads caused by the stilbestrol-in-oil injections, and persistent coital mimicry by animals weighing 700 pounds and above, there was risk of injury. In fact, heifer No.