butter and typical of the kind made from fresh sweet cream with no foreign flavors (93 score), to that which would possess minor flavor defects.

In order to eliminate butter of inferior quality, the production and sale of high quality cream should be encouraged and the marketing of poor quality raw material should be discouraged. To this end the following recommendations are offered:

1. A statewide cream quality educational program among the producers should be instituted.
2. Institution by the dairy industry of an effective cream grading program, designed to eliminate cream of inferior quality for butter manufacturing purposes.
3. Establishment of a price incentive sufficient to induce the cream producer to produce and market cream of high quality.
4. Vigorous enforcement of cream grading laws by the proper regulatory agencies.
5. Consumer education relative to the merits of butter of high quality.

1948 HATCHERY SUMMARY

The Poultry Improvement Board, Roy D. Carlson, Executive Secretary, has recently released its 1948 Hatchery Summary. Those desiring to obtain a complete copy should address The Poultry Improvement Board, Bismarck, North Dakota. Significant data indicating the status of the industry in the Hatchery year 1947-48 follows: total number of hatcheries, 55; number under supervision of Poultry Improvement Board, 55; total capacity, 4,138,755, of which 100% is under supervision of the Poultry Improvement Board; number of chicks hatched by North Dakota hatcheries, 4,740,455; number of birds in breeding flocks, 202,260; number of breeding flocks, 1,172; average size of breeding flocks, 173.

The percent of pullorum in these flocks at last test was .67%, significantly lower than in previous years. The number of birds in the mortality survey was 221,049, of which 6,213 or 2.81% were dead at the end of three weeks. The sale of breeds by percentages of total sales in order of popularity in 1948 was as follows: White Rocks, 31.4%; White Leghorns, 25.6%; New Hampshire, 18.5%; White Wyandottes, 1.9%; Barred Rocks, 1.7%; Buff Orpingtons, 1.4%; Rhode Island Reds, 1.2%. Cross breeds accounted for 15.1% of sales and others, 3.7%.

Chicken sexing is becoming of increasing importance in North Dakota. The percentage of chicks sexed of total chicks hatched is reported by years as follows: 1943, 4.9%; 1944, 8.9%; 1945, 11.7%; 1946, 14.4%; 1947, 20.1% and 1948, 22%. (Data abstract by H. L. Walster).