market prices. The family home is excluded from ranch investment; depreciation and repair costs on the home are excluded from annual ranch expenses. Production costs of the representative ranches reflect 1960 prices paid in each ranching area. Only the estimated ranch business share of telephone, utility, and automobile costs is included in the budgets. Interest on operating capital is charged at an annual rate of 6 percent for 6 months. Labor use on the representative ranches is the normal amount of labor for each size and type of ranch included in the survey, which means that small ranches used less than a full-time man equivalent. Hired labor is paid at the local 1960 wage rate, operator labor is charged at the rate of a full-time hired man, and family labor is charged at equivalent hourly wage rates.

The projected U. S. prices used in the budgets were developed by the Farm Production Economics Division, U. S. Department of Agriculture, for use in this and other research studies. Comparable projected prices were developed for the Omaha livestock market for cattle. The price projections based on this livestock market were adjusted to each ranching area by relating the projected prices on the base markets to 1953-60 average prices at a centrally located market for each ranching area. The cattle prices thus obtained were then adjusted to each ranch locality by subtracting an allowance for marketing and transportation charges. Required monthly and seasonal cattle prices were determined by relating the 1953-60 average monthly prices to the 1953-60 average annual price. The marketing practices and time of marketing for each ranch were the typical patterns for ranches of the type budgeted in each locality. In addition to the estimates of receipts based on projected prices, 1953-60 average cattle prices were also used to show the effect of a price change on net ranch income.

The animal unit months of feed required by livestock for each representative ranch budget were based on feed standards expressed in the following animal unit equivalents: Mature cows, 0. 91; yearling steers, 0. 68; yearling heifers, 0. 67; bulls, 1. 20; calves, 0. 51; and horses, 1. 00.

## CHARACTERISTICS OF REPRESENTATIVE RANCHES

Both cow-calf and cow-calf-yearling operations are included in the representative ranch budgets. The smaller cattle ranches are predominantly of the former type and the larger cattle ranches are mainly of the latter. Mature cows and replacement heifers average about 74 percent of livestock inventory numbers (table 4). The percent of yearling steers in each ranch inventory increases as ranch size increases.

The dependency of the representative ranches on Federal range forage varies from 27 to 93 percent of the annual feed requirement (table 5). The dependency is lowest for ranches with seasonal grazing permits, and highest for ranches with yearlong grazing permits. The animal unit months of grazing obtained from Federal range of the representative ranches varies from 120 to 5, 724 animal unit months.

The relationships which apparently affect the acreage of owned land are permitted animal unit months of grazing, carrying capacities, and cropland and pasture acreages. Ranches located at higher elevations require fewer acres of range and pasture per animal unit. For example, Forest Service permit ranches have 0. 4 acres of cropland and pasture and 4. 9 acres of rangeland per animal unit, as compared with no cropland and pasture and 32. 6 acres of rangeland per animal unit for the cattle ranches