

POTATO STORAGE IN THE COLUMBIA BASIN

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The Columbia Basin area of Washington saw a tremendous boom in construction of potato storages during 1961. As a result many new and some very interesting structures are a part of the Basin landscape today. There is every reason to believe that construction will continue in 1962 but at a slower pace.

The added storage capacity was built to meet the demands of potato processing, but it is inevitable that we will also have more potatoes for fresh market during winter and spring months. We still have a nationwide fresh market during late summer, but the processing and fresh market for storage potatoes is extra.

This change in the traditional status is good, but at the same time it places obligations on the industry and creates new problems. The industry's obligation is to provide annually an adequate supply of quality potatoes for processing and fresh market. The problems can be listed as follows:

- (1) We still face a perennial problem of leaf roll and net necrosis, even though we got by easily in 1961. Only a determined effort by the industry to control leaf roll, will fill our storages each fall. Empty storage facilities are costly.
- (2) Generally the potatoes harvested for storage are subjected to more rough handling and suffer more damage than those harvested in late summer. Contributing factors are: a. low soil and tuber temperatures in very late fall harvest, b. greater susceptibility to black-spot late in the season, and c. weather pressures to get the potatoes under cover. Cuts and bruises on cold tubers do not heal but generally develop into soft rots.
- (3) We need much experience in storage management in order to prevent excessive losses from decay, shrinkage, sprouting or failure to process. Quality potatoes can be stored successfully under many sets of conditions. However, trouble lots need special management and this is where forced air ventilating systems can really pay off.
- (4) Excess dirt in the storage pile is a common problem, but it is most serious when it occurs in a cone as a result of failure to move the bin piler often enough. Dirt interferes with proper ventilation.
- (5) There has been limited use of sprout inhibitors to date. The display section features two of the materials used for sprout inhibition.

A systematic survey of the storage facilities, both old and new, in the Basin area was started last fall. Recorded were the location, type of construction, present condition and capacity. All storages in Franklin and Adams counties were checked, but only a part of those in Grant county. To complete the storage picture for this discussion, the information on storage capacity in Grant county was assembled from various sources and will not be as complete as that for the other two counties.

The storage capacities listed below are approximate realizing that this is determined by the height of the storage pile, and that a few units may have been overlooked. In addition, some facilities are used interchangeably between potatoes and onions.

Franklin County

There are 12 storage units with a total capacity of approximately 344,000 cwt. Six of these units with a capacity of 214,000 cwt. were constructed in 1961. Eleven units are on farm of which 10 are below ground using pole, straw and a dirt or sheet metal cover.

Adams County

There are 19 storage units with a total capacity of 774,000 cwt. of which about 100,000 cwt. is devoted to onions. Twelve of these units with a capacity of 534,000 cwt. were constructed in 1961. Twelve storage units are located on farm. The type of construction is more variable in this area with 8 units below ground using pole, straw and dirt or sheet metal cover and the rest are above ground. The above ground units include 3 Douglas Fir Plywood Association type, 3 Timber Rib structures, Butler steel, tilt-up concrete, concrete block, regular frame and a poured concrete quonset type.

Grant County

There are 16 storage units in the Moses Lake-Warden area with a capacity of 786,000 cwt. Only one of these with a capacity of 40,000 cwt. was built in 1961.

There are only three storage units on the Royal Slope area with a capacity of 50,000 cwt. One of these was built in 1961.

There are approximately 40 storage units in the Quincy area with a capacity of about 1,140,000 cwt. Of these 6 units with a capacity of 244,000 cwt. were built in 1961.

The total for Grant county is thus 59 storage units with a capacity of about 1,978,000 cwt. of potatoes.

Basin Wide Storage Situation

There are at least 80 potato storage units in the Basin area with a total storage capacity of approximately 3,074,000 cwt. Of this 26 units representing 1,050,000 cwt. are new storage facilities added in 1961.