



# Optimize Potato Harvest

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Lazy Daisy Farm

## Overview

Spring of 2022 about 40 lbs of potatoes were planted. An additional unknown amount of seed potato was donated. The Donated varieties were Red Cherry and Shepody. Estimate of weight is 15 lb total. Since 10 rows had already been used in the field, potato towers

were constructed for the donated varieties. Some seed potatoes were also given to STC members. The amount of seed potato given to members is unknown.

## Overall notes

The kid's harvest was not weighed. This weight will be determined after sales are finalized at the end of the season.

Soil started at ph 6.5 amended to ph 6. Some scab. Harvested before the plants died. Earlier planting will allow for harvest in early September with better yield. As an experiment some plants were pulled in early Sept. to assess scab, harvested and replanted. All plants grew several more potatoes. Potatoes had enlarged lenticels indicating a lack of air in the soil aka: dense soil.

Because of limited compost to start the year the potato rows were minimally amended. It's highly likely that the yields would be higher with properly amended soil.

## Planted

### **3, 25' rows of Purple Viking,**

Notes: attractive potato, very colorful and smooth when cooked. Small to Medium size, high yeilding

Harvest weight: 1 row 26.5 lbs, 1 row 34.15 lb

### **3, 25' rows of Allagosh,**

Notes: same as above. Nice white potato. Small to medium in size

Harvest weight: 1/3 row, from replanted plants 5lbs, 2/3 of that row 20.37

### **1, 25' row of Red Cherry**

Note: Smaller Variety. The row definitely yielded was on the low side.

Harvest weight: 20.25

Notes: same as above. Starchy when cooked. Vibrant red. Smaller than other small-medium varieties

Harvest weight: tower 24lb

### **3.75, 25' rows (2 beds, 2 rows each) Russian Banana**

Harvest weight: 1  $\frac{3}{4}$ , 25' beds with 2 rows. 1st bed harvested 9/22/22: 28 lbs with  $\frac{1}{3}$  of the row having been replanted 2 weeks earlier ( the early harvest weight is unknown).

Second  $\frac{3}{4}$  bed harvested 9/23/22: 25 lbs

harvest weight: 53 lbs.

Very little scab. Potting soil made a huge difference in yield and ease of harvest. Plants replanted after test harvest yielded anywhere from 30% - 100% again 2 weeks later. Averaging 50%. 1 bed ( 2 rows) yielded 24 lbs including  $\frac{1}{3}$  replanted plants, not including initial test harvest.

### **Two 4' towers 2.25'(ish) diameter Shepody (one had a "row" of Red Cherry on top)**

1st tower was constructed with wood chips as the dividing medium. This seems to have made it difficult for the potatoes to expand and for water to reach the bottom half or to absorb water when watered from the sides. This tower had more dense soil used in it as well.

1st tower yield 12.5lb

**2nd tower.** Constructed with leaves and straw-like matter as the dividing medium. Sunshine 4 and fill soil mixed together. Seems to have made it easier for potatoes to expand and receive water.

2nd tower yield 34lbs

### **one 4' tower 2.25' (ish) diameter Red Cherry**

Same composition as above.

3rd tower yield: 24 lbs

(very similar to the 25' row)

Notes: scab in 1st tower was similar to field. Scab in 2nd and 3rd towers was minimal.

**Harvest Weight notes:** There are unknown weights from 2 harvests.

1. The very first harvest of the year. 4 potatoes were mixed together during harvest. The total was 95 lbs of Red Cherry, Purple viking, Allagosh and Russian Banana

Harvest Weight: Medley 95 lbs

- Harvest weights from the 3rd and 4th grade classes. There were 2 rows of purple viking and 1 row of allagosh. Estimate is a minimum of 50lbs of purple viking and 20lbs of allagosh. The kids each took home 1 potato.

**5 varieties, known weight: 348.77 lbs**

Weight with estimate from kids harvest (which is conservative at 70 lbs total 418.77 lbs

## Suggestions for 2023

Plant as soon as the ground is workable in spring for a greater yield in fall.

Plant most Tlingit and Russian Banana in rows and a few towers (narrow)

Plant all indeterminate potatoes in towers. 2' ish diameter

Amend rows with potting mix or lots of organic matter to allow for more oxygen in the soil.


## Other notes

### Kids Harvest

Having the kids out was great. They loved it. There were twenty 4th and 5th graders and 2 teachers, plus 2 farm workers- Cara and Brooke. Each Child took home 1 potato = about 10lbs. Each kid wanted the largest potato they could find. They were very excited to pick out and take home their potato.

Lack of close enough supervision resulted in tools and potatoes to be mishandled at times, resulting in damaged potatoes due to slicing with the pitch fork or shovel and bruising from potatoes being thrown long distances.

**Suggestions:** Next time, before the kids come out, send any educational materials to teachers including harvesting techniques, and rules about careful potato handling, so they can plan ahead for their visit. Show teachers (make a video?) the established roles in harvesting (**Popper** -uses pitch fork/shovel, plant **Catcher**- holds leaves/stems and gently lifts plant up, **Picker**-is across the row from the Catcher with basket, and takes potatoes attached to plant, two **Ditch Diggers** use hands to



pull soil away from center searching for potatoes, two **Gold Miners** - follow behind searching the ditch sides and fill in the ditch). Use of the shovel/pitchfork will be monitored at all times by one adult farm worker who will assist as needed. A second adult will join the *Gold Miners* to ensure potatoes aren't missed before the ditch is filled. Established roles will be rotated between children based on skill, interest and fairness.