

Eastern Idaho Southern Region: Bannock, Bingham & Power Counties

Russet Burbank Potatoes: Production and Storage Costs

Ben Eborn



Eastern Idaho

Introduction to Costs & Returns Estimates

The University of Idaho Extension produces crop costs and returns estimates every other year. The overall goal of this project is to provide the Idaho agricultural industry with an unbiased and consistently calculated estimate of the cost of producing various crops and to track the change in production costs per acre and per unit over time.

ΕΙΣ ΣΩΦΟΟΝΟΒΙ ΟΥ ΛΣΤΙΟΥ Σ ΟΥΣΟΣ ΙΩΣ ΟΣΥΝΩΩΣ ΣΩΠΨΤΨΣ ΙΟΣ ΘΤΟΕD on economic costs, not just accounting costs. All resources are valued at a market οΤΨ ΟΟ ΟΜΜΟΥΝΩΟΒΙ ΟΥΣΟ Input prices are taken from the U of L σ ΙΩΩΨΤΨ ΣΨΟΦΣΒΙ Ψf agricultural supply companies. The selling price is a historical average, not a current βΣΤΟ Σ ΜΩΩΣ Production practices are based on data from growers, crop consultants, and extension personnel throughout Idaho. Although production practices may be similar for individual farms, each farm has a unique set of resources with different levels of productivity, different production problems, and therefore different costs. Farm size, crop rotation, age and type of equipment, and the quality and intensity of management are all crucial factors that influence costs. The cost of production estimates show the typical or representative production costs by region based on documented production practices. These production costs are not area averages, rather they are based on model farms for four areas of the state.

University of Idaho costs and returns estimates can be used as a management tool to help producers in three ways:

- 1. Templates.** Excel spreadsheets have been created by the University of Idaho to make enterprise budgeting and record keeping an easy task. You can start by substituting our costs and returns estimates with your own numbers. You can also enter them in the οΨΨΟ /ost ΟΥΡΨΩ
- 2. Marketing.** Estimating production costs on a per acre or per unit basis can help you calculate βΨΨΟ ΨΤΟΨ Σ ΘΟΣΤΞ-even prices. Knowing your break-even price to cover operating costs and total costs can help with contract negotiations and selling on the open market.
- 3.**



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Background and Assumptions

Estimates are based on economic costs, not accounting costs. All resources are valued at a market rate based on the data collected annually by the University of Idaho from agricultural supply companies. The selling price for the commodity is typically an historical average price, not a current or projected price. The cost estimate shown here is typical for growing Russet Burbank potatoes under irrigation in the higher yielding southern counties. The costs shown in Table 1 include the costs to grow, harvest and sort potatoes. The total cost per cwt shown at the bottom of Table 1 is the cost to the end of the pile boom. Transportation costs to a processor or fresh pack facility are not included. Storage costs are shown in Table 2.

Production practices are based on data from potato growers in Bingham, Bannock and Power counties, crop consultants and extension personnel in eastern Idaho. Production practices depicted in this publication are not University of Idaho recommendations. Although production practices may be similar for individual farms, each farm has a unique set of resources with different levels of productivity, different production problems, and therefore different costs. Farm size, crop rotation,



insecticide is applied in-furrow at planting. Four foliar insecticides are applied by air during the growing season. Seven fungicide applications are made to control several different diseases. One fungicide is soil applied at planting, while six foliar fungicides are applied by air or chemigation from late June through August. Foliar fungicides are often tank-mixed with an insecticide.

Potatoes receive 22 inches of water during the growing season, 2.0 inch in May, 6 inches in June, 8.0 inches in July, and 6 inches in August. One inch of water is applied pre-harvest in September, and 2.0 inches applied to the grain stubble the previous fall is also credited to potatoes, for a total of 25 inches.

Machinery

Machinery and equipment ownership capital recovery cost is based on 75% of the replacement cost of a new piece of equipment, except for trucks. Truck prices are for a used vehicle with a new self-unloading bed. Equipment used in sorting and handling new self



internet service and utilities. Irrigation power is shown as a separate cost item and is not included as part of general farm utilities. Fees paid by the grower, listed under other operating costs, include: promotion fees paid to the Idaho Potato Commission and the National Potato Board, inspection fees paid to the Idaho Department of







Table 2. 2019 Cost per cwt to grow, harvest, sort and store Eastern Idaho Southern region Russet Burbank potatoes based on both field-run and paid yield.

	Storage Costs	Field Run Cost per Cwt	Paid Yield Cost per Cwt
Field-Run Yield		380.00	
Paid Yield %	90%		342.0
Base Cost to Grow, Harvest & Sort		\$6.90	\$7.67
Storage System Annual Ownership Costs	\$0.391	\$0.391	\$0.434
Base Cost + Storage Ownership Costs		\$7.29	\$8.10
Storage System Annual Repairs	\$0.044	\$0.044	\$0.049
Base + Storage System Ownership & Repairs		\$7.34	\$8.15
	Cumulative Storage Op. Costs	Cumulative Base + All Storage Costs	Cumulative Base + All Storage Costs
October	\$0.245	\$7.58	\$8.43
November*	\$0.446	\$7.78	\$8.65
December	\$0.548	\$7.89	\$8.76
January	\$0.650	\$7.99	\$8.87
February	\$0.753	\$8.09	\$8.99
March	\$0.854	\$8.19	\$9.10
April	\$1.075	\$8.41	\$9.35
May	\$1.199	\$8.54	\$9.49
June	\$1.345	\$8.68	\$9.65

* Indicates month when sprout inhibitor applied.

Base cost of production includes cost to grow, harvest & sort potatoes, both operating and ownership. Ownership costs for potato handling equipment are included in the base cost of production.

Storage system includes: storage facility, air system, and the equipment used to place.

Storage operating costs include: repairs (shown separately), plus monthly operating costs: labor, power, chemicals, interest, shrink & insurance.

Storage costs do not include the cost of removing potatoes from storage.

Cumulative storage operating expenses are calculated to the end of the month.

