



**IDAHO POTATOES**  
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**IDAHO RUSSET POTATO SIZE AND GRADE SUMMARY – 2006 CROP**

The statistics in this publication were obtained from the 2006 Potato Objective Yield Survey. The Idaho Agricultural Statistics Service would like to thank all growers who allowed the enumerators to dig samples in their fields. Without the voluntary cooperation of the farmers themselves, obtaining valid and timely agricultural statistics would be much more difficult. Because the samples of potatoes were dug by hand, the size and grade statistics in this document do not reflect harvesting or handling damage.

The survey results showed for the 2006 crop, 29.9 percent of the potatoes were at least ten ounces, compared to 28.6 percent that reached that size in 2005. Of the Russet potatoes in the 2006 sample, 77.0 percent met the 2.0 inch or 4 oz. minimum size and grade requirements for U.S. No. 1 potatoes, up from 74.8 percent last year. Processing grade, with a 1.5 inch minimum, accounted for 21.8 percent of the 2006 crop.

**PROCEDURE**

The 2006 Potato Objective Yield Survey consisted of 286 samples located throughout Idaho in fields selected in an unbiased and random manner. The selection of sample fields was based on all known potato acreage planted in 2006, with each acre having an equal chance of being chosen. As a result, growers with large acreages were more likely to be selected to participate in this survey. Several sample fields with varieties other than Russet were selected, but only the reports with Russet potatoes were used to compile the data in Tables 1 and 2. For each sample field, two plots were systematically located using computer generated random numbers. Each plot consisted of a twenty-foot section of a row. Digging of all samples occurred immediately preceding harvest or when all vines had died and growth of the tubers was no longer possible. Three hills of potatoes from each twenty-foot row section were carefully dug, counted, weighed, and then graded according to U.S.D.A. standards. Potatoes less than 1.5 inches in diameter were excluded from this procedure. To measure the harvest loss, post-harvest gleanings were taken for every fourth sample. The gleaning area consisted of two 3-by-6-foot plots, located five paces and five row space equivalents beyond the plots where the potato hills were dug. All potatoes and potato pieces, except whole potatoes under 1.5 inches in diameter, were collected, weighed, and graded. Geographic distribution of the 2006 sample fields is shown in the following table.

AREA	COUNTIES	NUMBER OF SAMPLE PLOTS
Southwest	Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley & Washington	37
South Central	Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka & Twin Falls	72
Eastern	Bannock, Bear Lake, Bingham, Bonneville, Franklin, Jefferson, Madison, Oneida & Power	158
Eastern Seed Counties	Butte, Caribou, Clark, Custer, Fremont, Lemhi & Teton	19

**TABLE 1 – IDAHO RUSSET POTATOES: SIZE AND GRADE – 2006 CROP <sup>1/</sup>**

AREA AND GRADE	1½" - 15/8"	15/8" - 17/8"	17/8" - 2"	2" or 4-6 oz	6-7 oz	7-8 Oz	8-9 oz	9-10 oz	10-11 oz	11-12 oz	12-13 oz	13-14 oz	14 oz and over	Total
Percentages (%)														
<b>SOUTH CENTRAL COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	22.2	8.7	7.9	6.4	6.0	4.9	3.8	3.0	2.5	12.1	77.5
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.5	5.9	3.1	1.3	0.6	0.9	0.8	0.7	0.3	0.8	0.7	0.4	4.6	21.6
Cull <sup>4/</sup> .....	-	0.1	0.1	0.1	0.1	0.1	-	0.1	-	0.1	-	-	0.2	0.9
<b>TOTAL</b> .....	<b>1.5</b>	<b>6.0</b>	<b>3.2</b>	<b>23.6</b>	<b>9.4</b>	<b>8.9</b>	<b>7.2</b>	<b>6.8</b>	<b>5.2</b>	<b>4.7</b>	<b>3.7</b>	<b>2.9</b>	<b>16.9</b>	<b>100.0</b>
<b>EASTERN COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	25.6	9.1	8.7	6.4	5.7	4.8	4.4	3.0	2.8	7.5	78.0
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.6	6.8	3.5	1.3	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.5	4.0	20.7
Cull <sup>4/</sup> .....	-	0.1	0.1	0.2	0.1	0.1	-	-	0.1	0.1	0.1	-	0.4	1.3
<b>TOTAL</b> .....	<b>1.6</b>	<b>6.9</b>	<b>3.6</b>	<b>27.1</b>	<b>9.6</b>	<b>9.3</b>	<b>6.9</b>	<b>6.2</b>	<b>5.3</b>	<b>4.9</b>	<b>3.4</b>	<b>3.3</b>	<b>11.9</b>	<b>100.0</b>
<b>EASTERN SEED COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	31.1	9.6	7.1	4.7	4.5	3.1	1.8	2.2	1.7	3.6	69.4
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	2.5	11.1	6.8	1.4	1.0	0.4	0.7	0.6	0.8	-	0.7	0.2	3.5	29.7
Cull <sup>4/</sup> .....	-	0.1	0.2	0.3	-	0.1	-	0.2	-	-	-	-	-	0.9
<b>TOTAL</b> .....	<b>2.5</b>	<b>11.2</b>	<b>7.0</b>	<b>32.8</b>	<b>10.6</b>	<b>7.6</b>	<b>5.4</b>	<b>5.3</b>	<b>3.9</b>	<b>1.8</b>	<b>2.9</b>	<b>1.9</b>	<b>7.1</b>	<b>100.0</b>
<b>TOTAL OTHER COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	24.8	9.0	8.3	6.3	5.7	4.7	4.1	3.0	2.6	8.8	77.3
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.6	6.8	3.6	1.2	0.5	0.6	0.7	0.6	0.4	0.5	0.4	0.4	4.2	21.5
Cull <sup>4/</sup> .....	-	0.1	0.1	0.2	0.1	0.1	-	0.1	0.1	0.1	-	-	0.3	1.2
<b>TOTAL</b> .....	<b>1.6</b>	<b>6.9</b>	<b>3.7</b>	<b>26.2</b>	<b>9.6</b>	<b>9.0</b>	<b>7.0</b>	<b>6.4</b>	<b>5.2</b>	<b>4.7</b>	<b>3.4</b>	<b>3.0</b>	<b>13.3</b>	<b>100.0</b>
<b>10 SOUTHWEST COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	19.5	7.8	7.9	7.7	5.4	5.8	3.9	3.5	2.7	8.0	72.2
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.3	5.0	2.2	2.0	1.0	1.4	1.7	1.4	1.5	0.9	1.2	1.7	5.2	26.5
Cull <sup>4/</sup> .....	-	0.1	0.1	0.2	0.1	-	0.1	0.1	0.1	0.1	-	-	0.4	1.3
<b>TOTAL</b> .....	<b>1.3</b>	<b>5.1</b>	<b>2.3</b>	<b>21.7</b>	<b>8.9</b>	<b>9.3</b>	<b>9.5</b>	<b>6.9</b>	<b>7.4</b>	<b>4.9</b>	<b>4.7</b>	<b>4.4</b>	<b>13.6</b>	<b>100.0</b>
<b>STATE</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	24.6	9.0	8.3	6.3	5.7	4.7	4.1	2.9	2.6	8.8	77.0
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.6	6.7	3.5	1.3	0.5	0.6	0.7	0.7	0.5	0.5	0.5	0.5	4.2	21.8
Cull <sup>4/</sup> .....	-	0.1	0.1	0.2	0.1	0.1	-	-	0.1	0.1	0.1	-	0.3	1.2
<b>TOTAL</b> .....	<b>1.6</b>	<b>6.8</b>	<b>3.6</b>	<b>26.1</b>	<b>9.6</b>	<b>9.0</b>	<b>7.0</b>	<b>6.4</b>	<b>5.3</b>	<b>4.7</b>	<b>3.5</b>	<b>3.1</b>	<b>13.3</b>	<b>100.0</b>

1/ Gross yield basis.

2/ Potatoes which meet the requirements for U.S. #1, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service.

3/ Potatoes which meet the requirements for U.S. #2, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service.

4/ Potatoes not meeting the requirements for U.S. #1 or U.S. #2, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service.

**TABLE 2 – IDAHO RUSSET POTATOES: SIZE AND GRADE – 2005 CROP <sup>1/</sup>**

AREA AND GRADE	1½" - 15/8"	15/8" - 17/8"	17/8" - 2"	2" or 4-6 oz	6-7 oz	7-8 Oz	8-9 oz	9-10 oz	10-11 Oz	11-12 oz	12-13 oz	13-14 oz	14 oz and over	Total
Percentages (%)														
<b>SOUTH CENTRAL COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	22.3	8.0	8.4	7.7	6.0	5.2	4.7	3.8	2.6	7.8	76.5
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.4	5.9	3.5	1.6	0.8	0.8	0.9	0.9	0.7	0.7	0.6	0.5	4.2	22.5
Cull <sup>4/</sup> .....	-	0.1	-	0.3	0.1	-	0.1	0.1	0.1	-	-	0.1	0.1	1.0
TOTAL .....	1.4	6.0	3.5	24.2	8.9	9.2	8.7	7.0	6.0	5.4	4.4	3.2	12.1	100.0
<b>EASTERN COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	24.7	9.5	8.0	6.4	5.6	5.2	2.8	3.1	1.7	7.3	74.3
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.9	7.0	4.5	1.8	0.5	0.8	0.8	0.7	0.4	0.8	0.7	0.3	4.3	24.5
Cull <sup>4/</sup> .....	-	0.2	0.1	0.3	0.1	0.1	-	0.2	0.1	0.1	-	-	-	1.2
TOTAL .....	1.9	7.2	4.6	26.8	10.1	8.9	7.2	6.5	5.7	3.7	3.8	2.0	11.6	100.0
<b>EASTERN SEED COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	24.2	7.3	7.3	6.5	5.9	3.9	4.1	3.0	2.7	7.3	72.2
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	2.8	10.0	4.7	1.5	0.4	0.7	0.5	0.6	0.3	0.5	0.5	0.1	3.7	26.3
Cull <sup>4/</sup> .....	-	0.2	0.1	0.5	0.1	0.1	0.1	-	-	0.2	-	-	0.2	1.5
TOTAL .....	2.8	10.2	4.8	26.2	7.8	8.1	7.1	6.5	4.2	4.8	3.5	2.8	11.2	100.0
<b>TOTAL OTHER COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	23.8	8.6	8.0	6.8	5.8	4.9	3.7	3.3	2.2	7.5	74.6
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.9	7.2	4.2	1.7	0.6	0.8	0.8	0.8	0.5	0.7	0.6	0.3	4.1	24.2
Cull <sup>4/</sup> .....	-	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	-	-	0.1	1.2
TOTAL .....	1.9	7.3	4.3	25.8	9.3	8.9	7.7	6.7	5.5	4.5	3.9	2.5	11.7	100.0
<b>10 SOUTHWEST COUNTIES</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	17.3	8.2	8.1	7.0	6.0	5.3	4.8	5.0	3.5	14.9	80.1
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.0	4.0	2.9	1.6	0.5	0.8	0.5	0.8	0.8	0.6	0.4	0.5	4.9	19.3
Cull <sup>4/</sup> .....	-	-	-	0.2	0.1	-	0.1	0.1	-	0.1	-	-	-	0.6
TOTAL .....	1.0	4.0	2.9	19.1	8.8	8.9	7.6	6.9	6.1	5.5	5.4	4.0	19.8	100.0
<b>STATE</b>														
U.S. No. 1 (2" min) <sup>2/</sup> .....	-	-	-	23.6	8.5	8.0	6.8	5.9	5.0	3.7	3.4	2.3	7.6	74.8
U.S. No. 2 or Processing Usable (1 ½ min) <sup>3/</sup> .....	1.9	7.1	4.1	1.7	0.6	0.8	0.8	0.7	0.5	0.7	0.6	0.3	4.2	24.0
Cull <sup>4/</sup> .....	-	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	-	-	0.1	1.2
TOTAL .....	1.9	7.2	4.2	25.6	9.2	8.9	7.7	6.7	5.6	4.5	4.0	2.6	11.9	100.0

1/ Gross yield basis.

2/ Potatoes which meet the requirements for U.S. #1, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service.

3/ Potatoes which meet the requirements for U.S. #2, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service.

4/ Potatoes not meeting the requirements for U.S. #1 or U.S. #2, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service.

**TABLE 3 – IDAHO POTATOES: AVERAGE NUMBER OF HILLS PER ACRE BY TYPE 2005 & 2006 CROPS <sup>1/</sup>**

TYPE	NUMBER OF SAMPLES		AVERAGE NUMBERS OF HILLS PER ACRE	
	2005	2006	2005	2006
Reds	5	6	13,665	13,811
Whites	9	4	12,740	12,019
Russets	265	276	12,502	12,480
TOTAL	279	286	12,530	12,501

1/ Based on row measurements and counts in potato fields selected for objective yield samples.

**TABLE 4 – IDAHO ALL POTATOES: QUANTITY LEFT IN FIELD AFTER HARVEST – 2005 & 2006 CROPS <sup>1/</sup>**

AREA	2005 CROP		2006 CROP	
	NUMBER OF SAMPLES	CWT PER ACRE	NUMBER OF SAMPLES	CWT PER ACRE
Southwest	10	20	10	21
South Central	18	29	18	25
Eastern	23	31	35	28
Seed Co.'s	10	25	5	50
STATE	61	28	68	30

1/ Potatoes left in the field at time of harvest. Based on counts in potato fields selected for post harvest samples.

**TABLE 5 – SELECTED STATES LONG POTATOES (RUSSET & SHEPODY) - 2006 CROP <sup>1/</sup>**

STATE	1½"	15/8"	17/8"	2" or 4-6 oz	6-7 Oz	7-8 oz	8-9 oz	9-10 oz	10-11' oz	11-12 oz	12-13 oz	13-14 Oz	14 oz and over	Total
	Percentages (%)													
ID 2/	1.6	6.8	3.6	26.1	9.6	9.0	7.0	6.4	5.3	4.7	3.5	3.1	13.3	100.0
MN	1.5	6.3	5.4	25.8	10.8	9.5	8.5	6.6	5.3	4.6	3.1	3.3	9.3	100.0
ND	1.0	6.6	4.8	28.0	10.8	9.1	8.4	6.3	5.2	4.7	3.8	2.3	9.0	100.0
OR	1.7	5.3	3.1	21.9	8.4	9.8	7.7	6.7	7.1	4.9	3.9	3.6	15.9	100.0
WA	0.9	4.3	2.5	23.6	9.0	9.6	8.7	7.3	6.2	5.2	4.5	2.7	15.5	100.0
WI	0.8	5.2	4.5	28.1	11.2	9.1	8.3	7.6	5.3	4.4	4.3	2.7	8.5	100.0

**TABLE 6 – SELECTED STATES GRADING CATEGORIES - 2006 CROP <sup>1/</sup>**

AREA AND GRADE	U.S. NO. 1 2 INCH MINIMUM <sup>3/</sup>	U.S. NO. 2 OR PROCESSING USABLE <sup>4/</sup>	CULL <sup>5/</sup>	TOTAL
	Percentages (%)			
LONG POTATOES				
ID 2/	77.0	21.8	1.2	100.0
ME 6/	62.9	20.3	16.8	100.0
MN	70.7	19.9	9.4	100.0
ND	65.8	23.1	11.1	100.0
OR	75.3	23.7	1.0	100.0
WA	80.2	18.0	1.8	100.0
WI	80.8	18.3	0.9	100.0

1/ Gross yield basis. 2/ Russet potatoes only. 3/ Potatoes which meet the requirements for U.S. #1, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service 4/ Potatoes which meet the requirements for U.S. #2, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service. 5/ Potatoes not meeting the requirements for U.S. #1 or U.S. #2, as stated in U.S. Standards for Grades of Potatoes, USDA, Agricultural Marketing Service. 6/ Percent of net yield – adjusted for field loss.