

POTATO ESTIMATING PROGRAM -- U. S. D. A.

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Potato production forecasts and estimates are made by the Statistical Reporting Service, U. S. D. A., for six different seasonal crop classifications in the United States. These seasons overlap slightly, but this is unavoidable. The Winter potato crop is grown in Florida and California and comprised only 1.8 percent of the annual National production on the average during 1951-60. These potatoes are harvested January through March.

Harvest of Early Spring potatoes begins around the first of April in Florida and Texas and ends about the middle of May. This crop, on the average, comprises only about 1.6 percent of the United States total. The Late Spring crop is produced in eleven southern states and comprises about 10.2 percent of the National total. Harvest of this crop is between the middle of May and end of June.

There are also eleven states producing Early Summer potatoes, harvested from July to the middle of August. This crop comprises only 5.3 percent of the United States production on the average. Marketings may extend into the Late Summer season in some years. Washington produces about 15 percent of the total Late Summer crop in competition with 21 other states. However, the total Late Summer crop averages about 14.2 percent of the National total per year. The Late Summer crop is harvested from the middle of August to the first of October. In Washington, all potatoes marketed prior to October 1 are considered Late Summer crop and all those marketed after October 1 are considered Fall.

The Fall crop, on the average, comprises 66.9 percent of the annual United States production. Washington averaged only 2.4 percent of the Fall crop during the period 1951-60 -- a relatively insignificant portion of the production. Idaho is first of all Fall states, producing 23.3 percent of the Fall crop in 1962. Maine was second with 20.2 percent of the crop, followed by New York, North Dakota, Minnesota, Colorado, Connecticut, Michigan, Wisconsin and Washington in that order. There are sixteen states with production less than Washington of the Fall group.

Acreage Estimates

In March the Statistical Reporting Service conducts surveys to measure farmers' intended planted acreage for the year. This is released to farmers in a report about March 22 so they can adjust their plantings if they so choose. Two surveys gather the information needed.

1. Cards asking for acreages of most field crops are sent to a sample of Washington farmers. Reports from these farmers are edited and compiled into district and state totals. The R/L indication is the ratio of all potatoes to total cropland. This is read on a regression

chart against final crop figures in previous years and is then expanded to a state total. The C/H indication is taken from total acres of all farms reporting acres intended for planting in current year divided by acres they reported harvested for the previous year. No identical matching of cards is necessary in this survey.

2. A special potato grower inquiry is mailed to a sample of known commercial potato growers in the state also. This is necessary because of the specialization of the crop. Increased sampling rate adds precision to the estimates. A C/H comparison is made the same as on the general acreage survey, using the percentage change from last year as an indication which is read on a regression chart. On this schedule the grower is asked what percentage change he expects for his locality from last year's harvested acreage. This is read on a separate regression chart giving us another acreage indication from the questionnaire.

On the basis of the four sample indications and of information gathered from people in the potato trade, who are visited prior to the report, an acreage estimate is made. A narrative report is included with the acreage estimate; therefore, field contacts and travel are essential.

In June, surveys are made to determine actual amount of acres planted to potatoes and to determine what growers intend to harvest. Cards are mailed to farmers throughout the state similar to the March Intentions Survey. Farmers report acreage harvested last year and what they expect to harvest in the current year. Ratio to land, current to historic and current to current indications are computed. The current to current indication is the percent change from last year arrived at by matching identical farm reports. This means matching last year's card with current card. Using this year's current report divided by last year's current report gives percentage change which is read on a regression chart. The current to historic indication is percentage change is shown by the reported acreage for current year divided by what the farmer reports as having harvested last year on the same card. Again regression charts are used in interpreting indications.

In June, the Columbia Basin Land Use Survey is also made. This survey is the cooperative work of five agencies and is quite complete as a higher sampling rate is used than for our state survey. This covers the largest potato producing area and is used in adjusting our state estimate.

A grower disposition schedule is mailed to potato growers in the state in June for the purpose of determining home use and other disposition items for the previous year. Questions on current and historic acreages also are asked. From this an indicated percent change of planted acres this year to harvested acres last year can be calculated.

Seed potato inspection data available in June gives another indication of acres planted to potatoes. Regression charts are kept comparing amount of seed potatoes inspected each year with what the final planted acreage has been. These regression charts can be read and interpreted giving an additional indication. The correlation between seed inspected and acreage planted has been very good in the past. Thus it can be seen that six indications are used for the estimate. Every effort is made to make the most precise estimate of potatoes possible as this acreage affects the production estimates for the remaining season.

The estimate of acreage for harvest can be revised in December, following the final acreage surveys. The primary object of these fall acreage surveys is to measure the acreage actually harvested and determine amount of abandonment. Acreage cards are tabulated for ratio to land and are matched for the current to current percentage change. We also obtain the current to current percentage from the grower special survey of acreage and production which gives the breakdown of Late Summer and Fall crops.

The Washington Potato Committee reports give an indication of how much was harvested as Early and from grower reported yields early potato acreage can be determined.

Yield Forecasts

In July the first forecast of potato production is made with only the Late Summer crop being estimated. For this estimate indications for all potatoes are obtained from a list of regular crop reporters who report on general farm conditions each month of the year. This is supplemented by a Special Potato Inquiry sent to commercial potato growers. Condition reports are obtained which are given in terms of percent of a full crop had there been no adverse conditions due to insects, disease, etc. and also include probable yield estimates for the grower's locality. These are read on regression charts in much the same manner as the acreage survey and become the primary indications. These are, however, evaluated on the basis of field travel and contacts with informed growers and industry people.

From July through October there is the General Crop Schedule and the Grower Special Inquiry to tabulate to make current monthly forecasts the same as in the July 1 report. However, in these months estimates are made for total crop as well as Late Summer and Fall crops.

For the month of November there is only a total yield indication on the General Crop Schedule. Yield indications for Late Summer and Fall potatoes come from the Grower Special Acreage and Production Inquiry. From the Acreage and Production Schedule there is a preliminary tabulation made at this time. No condition questions are asked. Field contacts are used as in other months.

Annual Production Estimates

For the final estimate of the year the regular Acreage and Production Schedule --which is mailed to general crop farmers throughout the state-- and the Grower Special Acreage and Production Inquiry--which was used for a preliminary tabulation in November--are used. Both surveys provide yield indications for the two crops which combined gives total potato production. At this time there are Potato Committee reports which are used as check data for the Late Summer crop. Used in conjunction with the December 1 potato stocks, it is possible to obtain an indication of what the Fall crop production should be.

In June each year final revisions are made for the previous year. At that time there is additional check data such as final Potato Committee reports, railroad shipments and truck unloads, grower disposition survey, and summaries

of the irrigation project reports available which give the best check possible on production, yield and acreage.

Stocks Reports

The Washington Crop and Livestock Reporting Service is also responsible for making four stocks reports, December 1 through March 1. Considerable field travel and some telephone calls were made to make nearly complete coverage of the storages in the Columbia Basin. Mailed reports are relied on in the remaining districts which are more stable and do not store as many potatoes. For the December 1 estimate dealers, county agents and informed sources are contacted to obtain locations of all new farm and truckside potato sheds. These are then located on maps and checked for storage on December 1. Ratio to capacity indication and a ratio to production indication are used. Dealers are stratified into two size groups and all of the large ones are contacted: attempts are made to contact all or nearly all the smaller ones. During January, February, and March identicals are used as a check on percent change from month to month. For these months the Potato Committee reports are used as an indication of disappearance from the previous month.

Releases

Releases covering the estimates made are issued after each survey. All releases made from this office in chronological order are:

January 7	Certified Potato Seed Report
January 15	January 1 Potato Stocks
January 15	Annual Crop Report (Includes historical data)*
February 15	February 1 Potato Stocks
March 15	March 1 Potato Stocks
March 22	Acreage Intentions Report (Principal crops Washington and National only)*
July 15	July Crop Report (Late Summer Production)*
August 15	August Potato Report (Seasonal and leading state estimates)
September 15	September Potato Report
October 15	October Potato Report
November 15	November Crop Report*
December 20	December 1 Potato Stocks

*Brief potato summary included along with other crops.

The address where these releases can be obtained is:

Washington Crop and Livestock Reporting Service
348 Federal Office Building
Seattle 4, Washington

The Market News Service of the Agricultural Marketing Service also releases information that is valuable to growers and dealers. They release information on amount of truck unloads converted to carlot equivalents in 100 selected cities and shipments of potatoes by rail. They also give daily prices of potatoes on various markets.

Charles Sherman is the local representative in Yakima. His address is:

U. S. Dept. of Agriculture, AMS
Fruit and Vegetable Division
235 Liberty Building
Yakima, Washington

The daily vegetable report from that office includes potato prices to growers, less sorting, F.O.B. price at loading point and also wholesale prices at various markets in the Nation. Daily reports on rail shipments out of the commercial potatoes areas also are available.

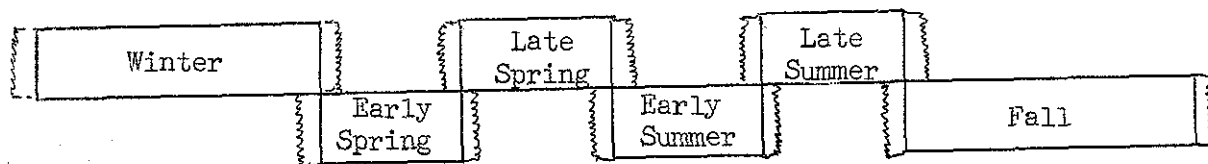
Leroy Gay is the local representative in the Seattle area. The Seattle Daily Fruit and Vegetable Report gives the Seattle wholesale potato price and wholesale prices in other selected cities. It also includes the truck unloads converted to carlot equivalents in Seattle and Tacoma.

The address of Mr. Gay is:

U. S. Dept. of Agriculture, AMS
Fruit and Vegetable Division
228 Federal Office Building
Seattle 4, Washington

POTATOES - PEAK HARVESTING PERIODS

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.



STATES GROWING POTATOES IN EACH OF THE ABOVE SEASONS

Winter

Florida
California

Early Spring

Florida
Texas

Late Spring

North Carolina
South Carolina
Georgia
Alabama
Mississippi
Arkansas
Louisiana
Oklahoma
Texas
Arizona
California

Early Summer

Missouri
Kansas
Delaware
Maryland
Virginia
North Carolina
Georgia
Kentucky
Tennessee
Texas
California

Late Summer

Massachusetts
Rhode Island
New York
New Jersey
Pennsylvania
Ohio
Indiana

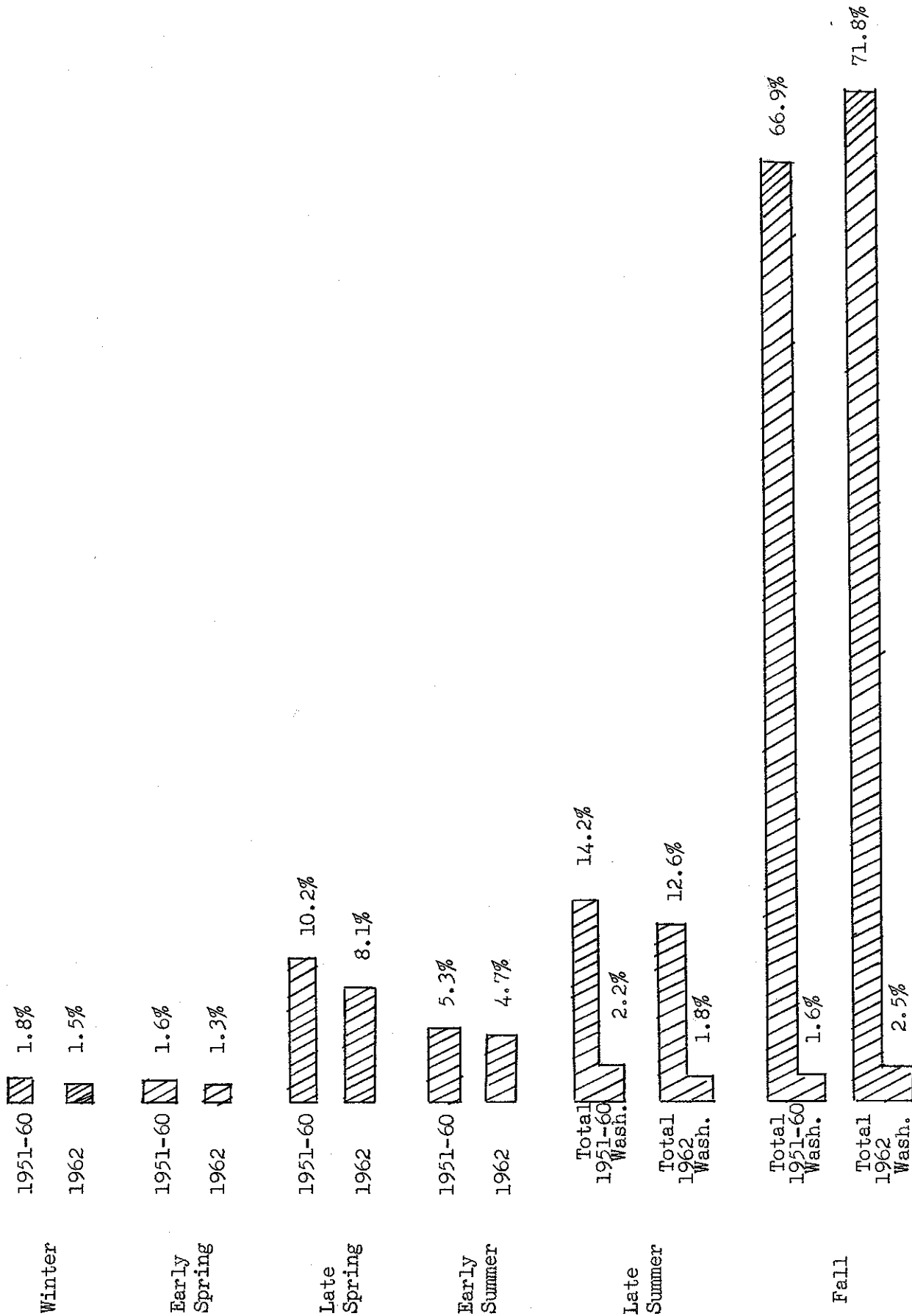
Late Summer (Cont'd.)

Illinois
Michigan
Wisconsin
Minnesota
Nebraska
Maryland
Virginia
West Virginia
North Carolina
Idaho
New Mexico
WASHINGTON
Oregon
California

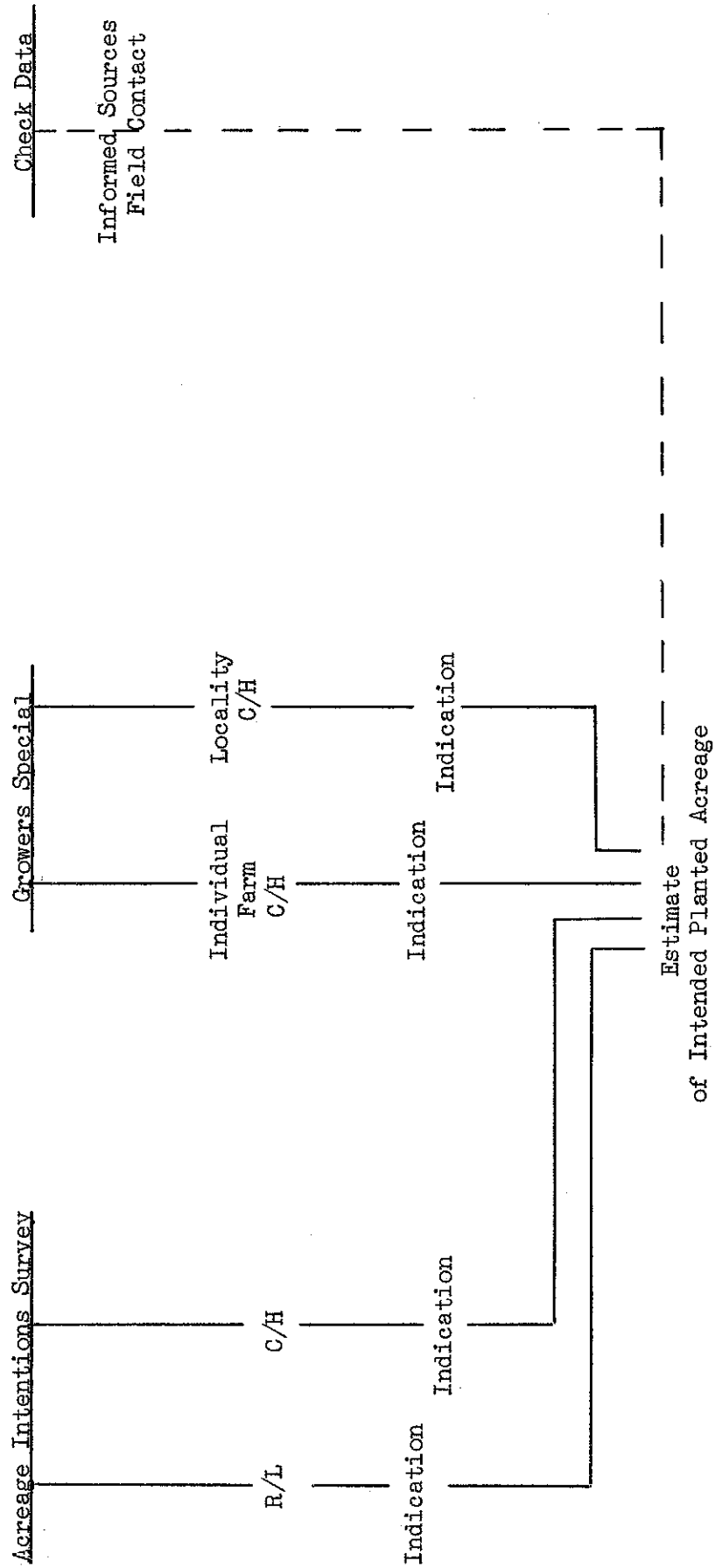
Fall

Maine
New Hampshire
Vermont
Massachusetts
Rhode Island
Connecticut
New York
Pennsylvania
Ohio
Indiana
Michigan
Wisconsin
Minnesota
Iowa
North Dakota
South Dakota
Nebraska
Montana
Idaho
Wyoming
Colorado
Utah
Nevada
WASHINGTON
Oregon
California

PERCENT OF TOTAL U. S. POTATO CROP PRODUCTION
BY SEASONS, 1951-60 AVERAGE AND 1962

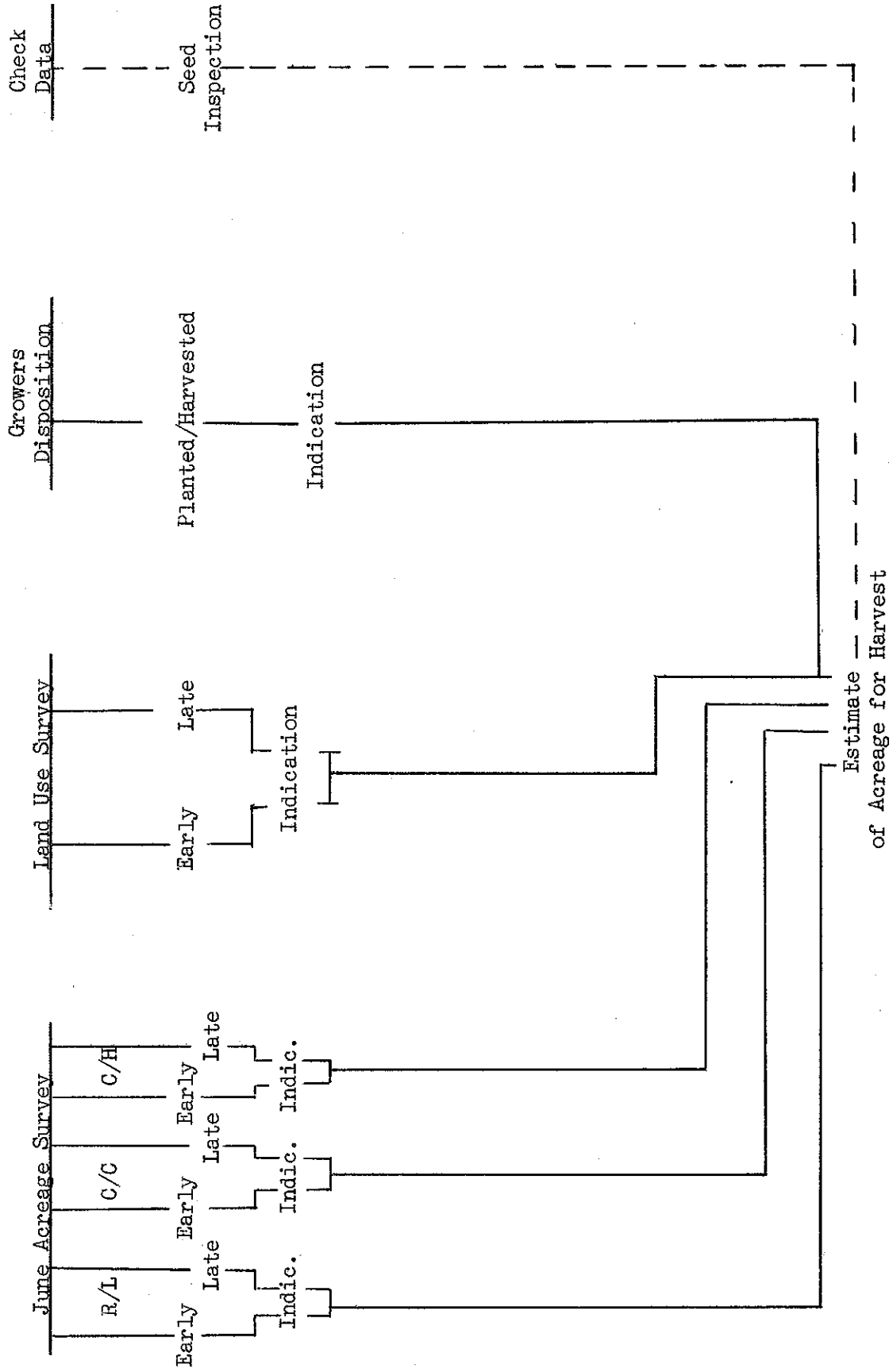


MARCH ACREAGE

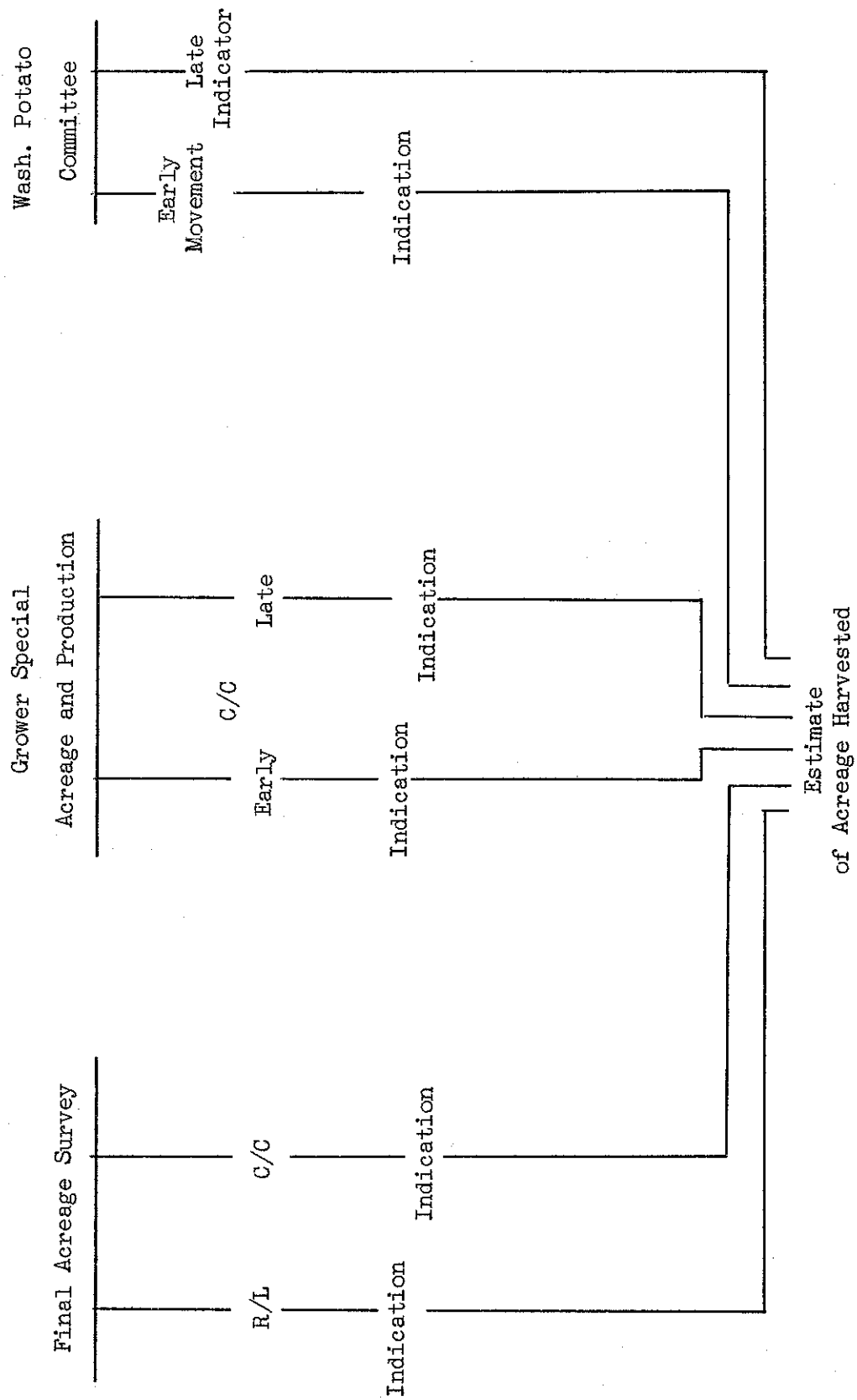


JUNE ACREAGE

Columbia Basin

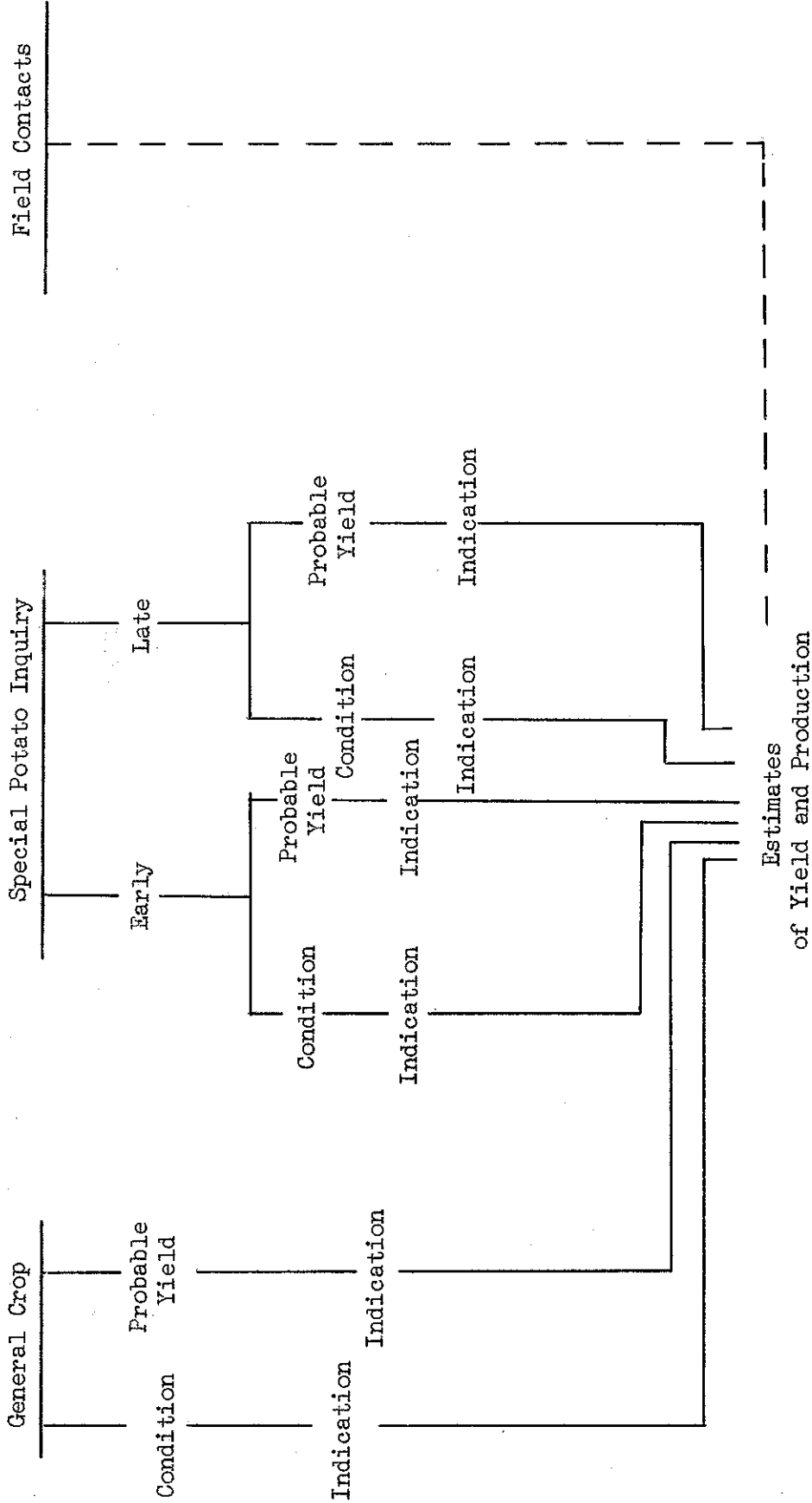


FINAL ACREAGE



YIELD AND PRODUCTION

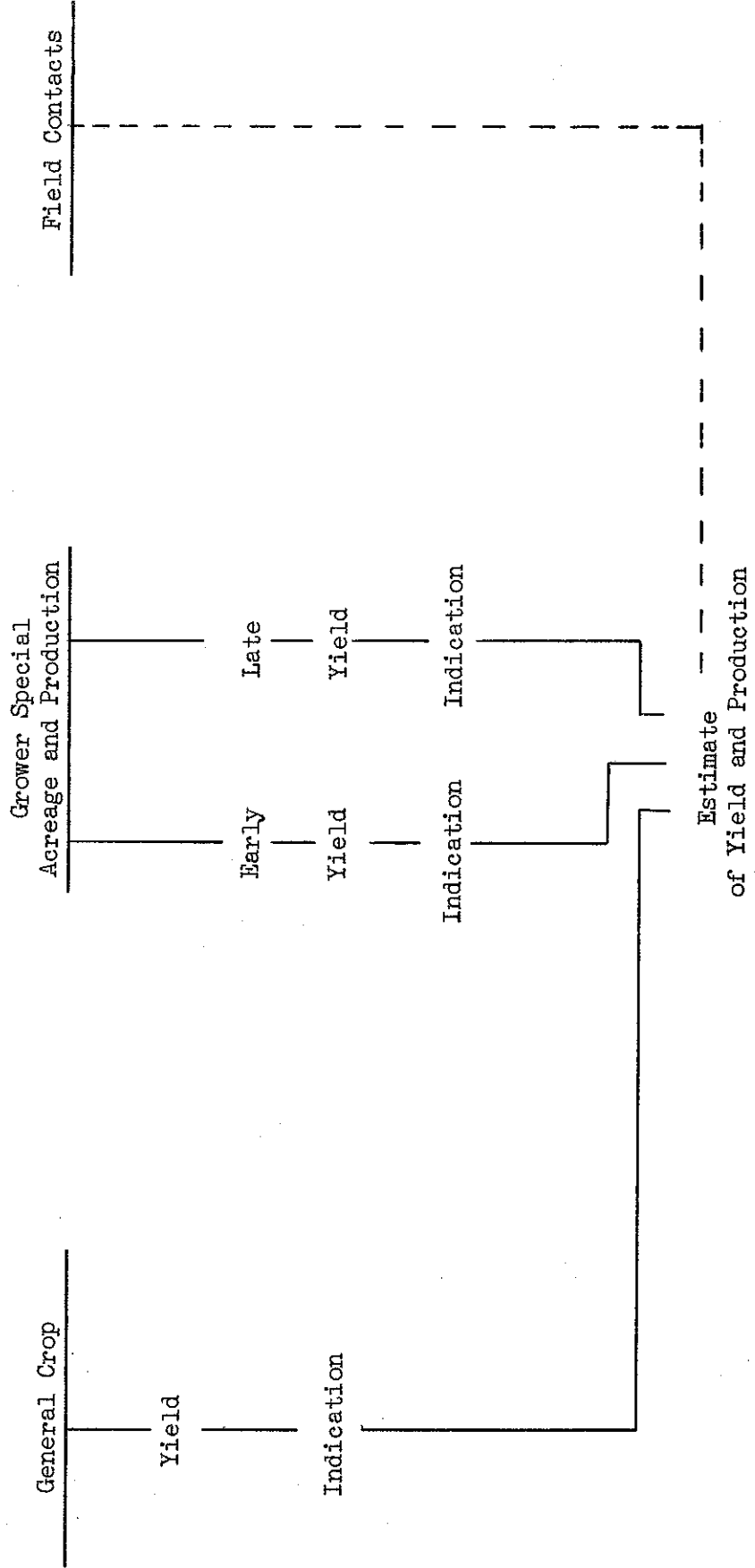
July Through October*



* July, Early Crop Estimates only; August through October, Early and Late Crop Estimates.

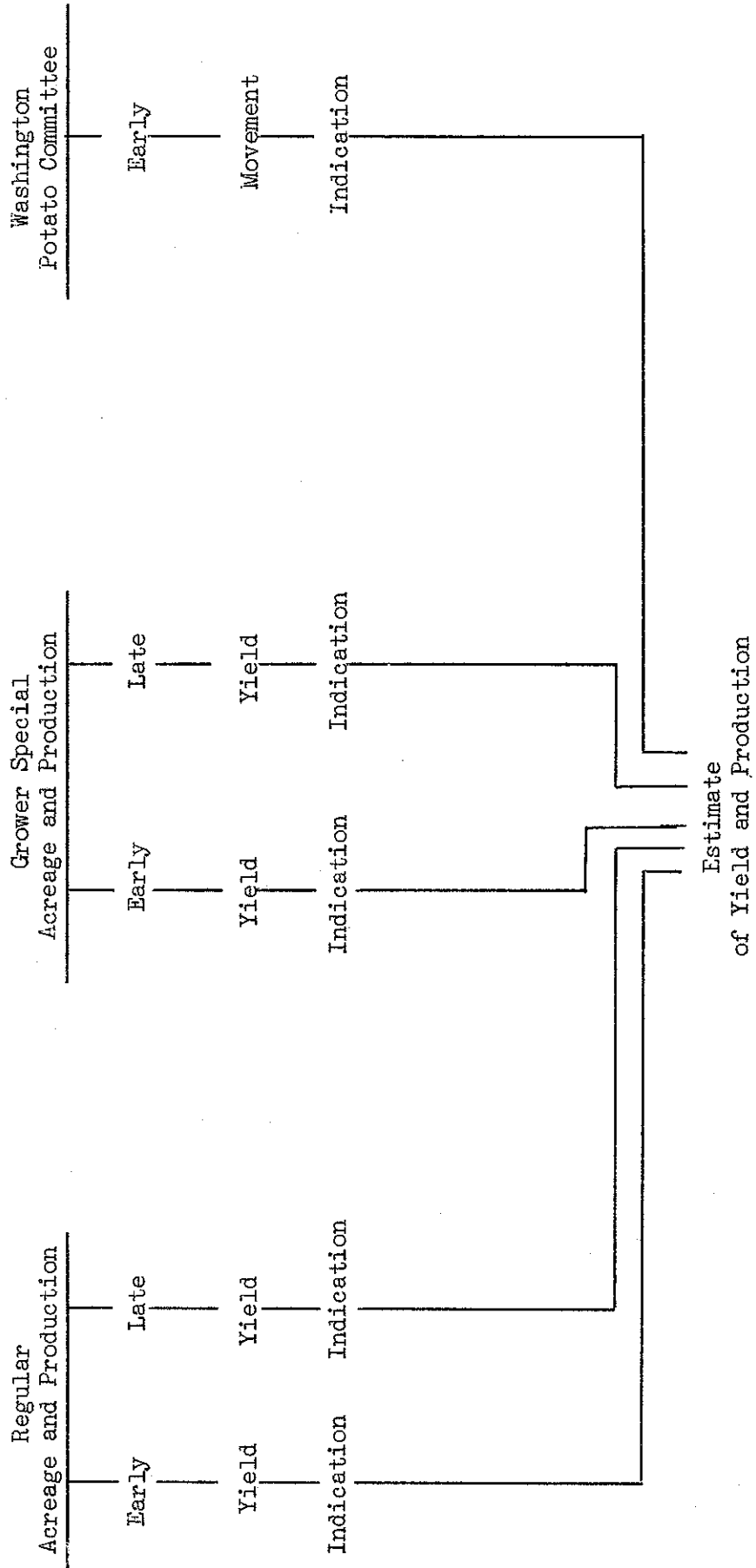
YIELD AND PRODUCTION

November



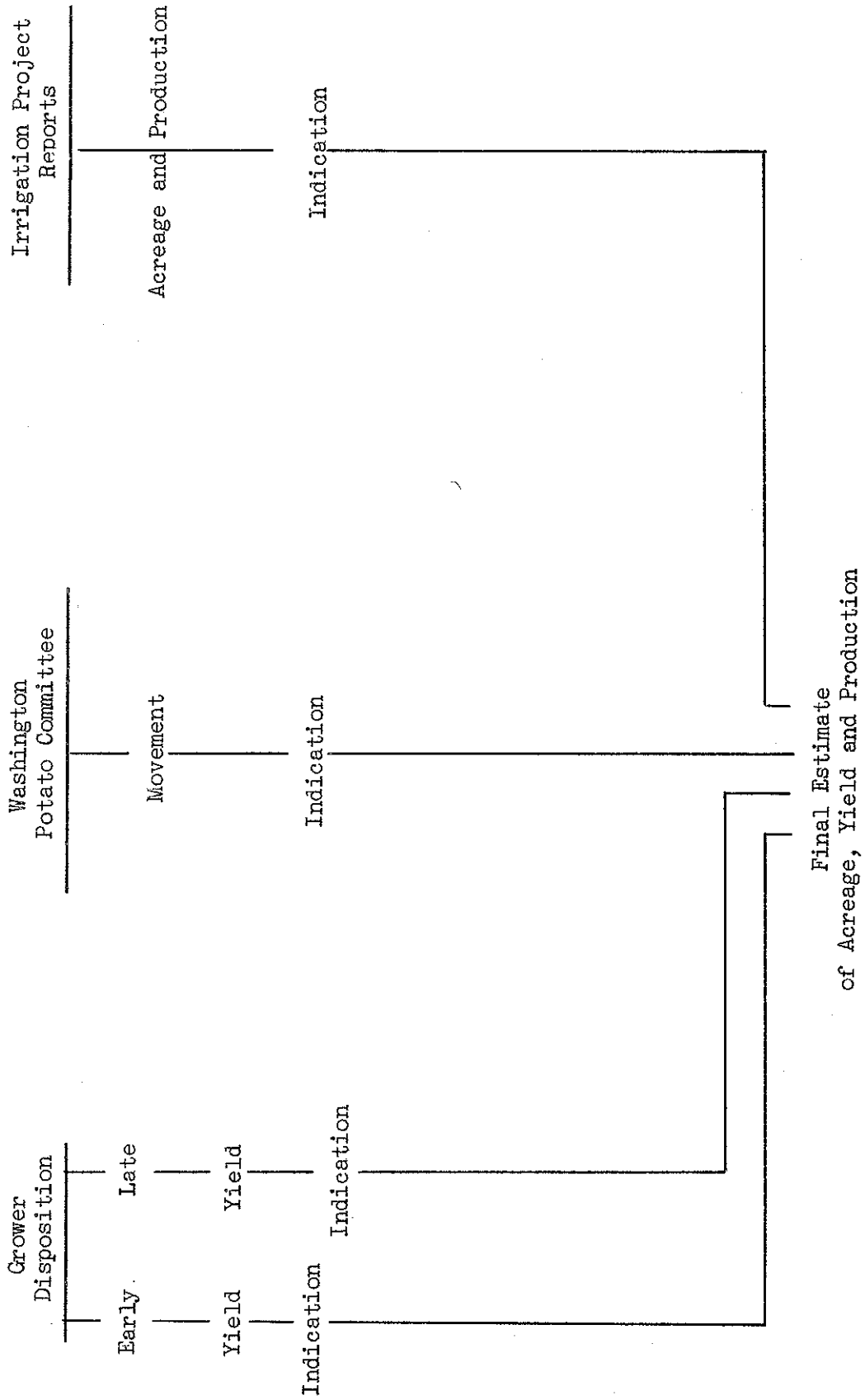
YIELD AND PRODUCTION

December Final



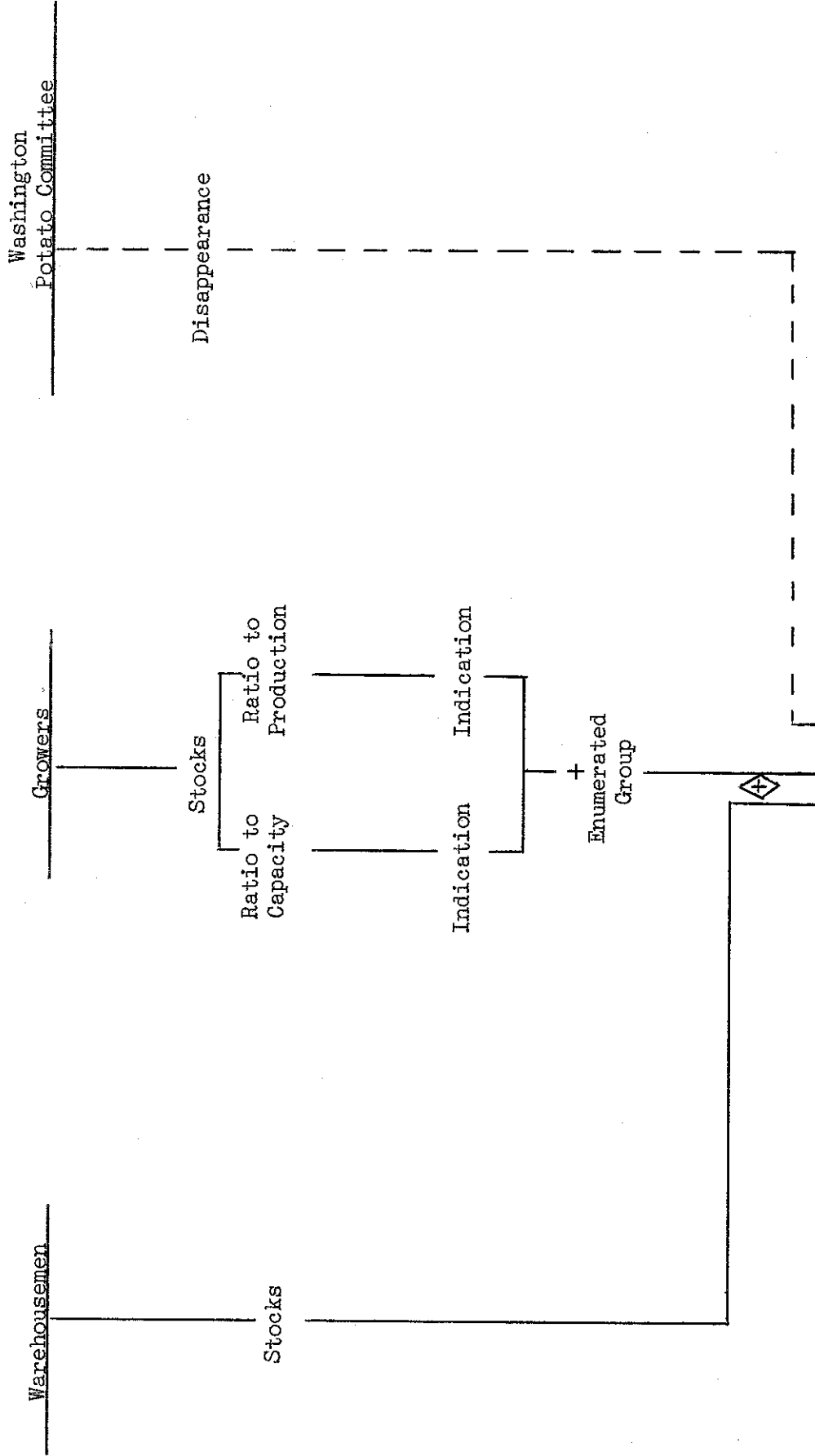
FINAL REVISION

June



STOCKS

December Through March



Estimate of Stocks on Hand in Washington

POTATO REPORTS AVAILABLE FROM
THE WASHINGTON CROP AND LIVESTOCK REPORTING SERVICE

January 7	Certified Potato Seed Report
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WASHINGTON CROP AND LIVESTOCK REPORTING SERVICE
348 Federal Office Bldg., Seattle 4, Washington

REPORTS AVAILABLE FROM A.M.S. MARKET NEWS

Charles Sherman, Local Representative
U.S.D.A., AMS Fruit & Vegetable Division
235 Liberty Building
Yakima, Washington

Daily report includes reported potato prices to growers less sorting, FOB price at loading point and wholesale prices in various cities of the Nation.

Leroy W. Gay, Local Representative
U.S.D.A., AMS Fruit & Vegetable Division
228 Federal Office Building
Seattle 4, Washington

Daily report includes Seattle wholesale potato prices as well as wholesale prices at other selected cities.

1963 POTATO OUTLOOK - SUMMER POOR; FALL GOOD

Karl Hobson

Washington State University Extension Marketing Price Specialist, Pullman

Late Summer Washington Potatoes (Potatoes dug in July, August, and September.)--

Outlook is uncertain and unpredictable at this time, but developments indicate poor prices.

A. Prices for our summer potatoes are governed by five factors:

1. Supply of old crop potatoes in May, June, and July.
2. Size of California's late spring crop (Dug mostly in May and June).
3. Size of the early summer crop (Dug in June and July).
4. Size of the late summer crop (Dug in July, August, and September).
5. Late summer production in the Pacific Northwest and California.

B. Most of the factors point to low prices for summer potatoes.

1. Supply of old crop potatoes in May, June and July.

This could go either way, but the balance seems to indicate large supplies of old potatoes at that time. January 1 stocks were 5 per cent under a year earlier but otherwise the largest on record. They were 12 per cent larger than two years ago when we had plenty of potatoes but not too many. In the Russet areas, January 1 stocks were down 14 per cent from a year earlier, but they were 22 per cent larger than two years earlier. Also, Maine growers have treated more potatoes with sprout inhibitor than ever before and they will hold more of these than ever for sale in June and July. That's because last year the only potatoes they made any money on were the ones they sold in June and July. On the other hand, freezes in the early areas and heavy exports to Europe could turn the tide and make May, June, and July supplies of old potatoes scarce.

2. Size of California's spring crop.

This is the one factor that looks real favorable at this time. California plans to reduce acreage 5 per cent to the lowest level since 1951. Per acre yield may be down too. Early planting conditions have been poor -- cold and dry. Last year's yield was above average.

3. Size of the early summer crop.

These areas got good prices last year because both acreage and yield were low, giving them the smallest crop in 5 years. They

are almost sure to expand acreage sharply this year and chances favor better yields. But most of this acreage is not irrigated. Poor growing conditions can cut yields sharply any season.

4. Size of the late summer crop.

The late summer crop is likely to be larger this year, but this is very uncertain. Last year prices were the best in 3 years in the East, best in 2 years in the West. But yields were a record high last year and could easily be lower this year.

5. Late summer production in the Pacific Northwest and California.

Production may be down some in these areas this year. Yields may be lower because they were a record high last year. Acreage may be up little or none because only the early sales brought good prices last year. This indicates that late August and September prices may be better than last year.

Fall Potatoes - Moderately good prices seem likely for the fall crop this year. Prices something like those received in 1960 seem most likely.

- A. Acreage is pretty sure to be reduced some -- acreage is always reduced after we have two low price years in a row. Reduction may be:
 - 1. About 2 per cent if the price of storage potatoes rises between now and June.
 - 2. About 4 per cent if prices go down between now and June. This looks the most likely at this time.
- B. Per acre yields are likely to drop to about 190 hundredweight. This would still be the highest yield on record except for the past two years. Per acre yields nearly always drop after two years of low prices and large crops.
- C. Production of around 180 million bags of fall potatoes seems likely. This would be up only 3 per cent from 1960. Population is up about 5 per cent and per capita demand seems to be about the same as in 1960.
- D. But Russet production might be up. Idaho prices have been fair this year and per acre yields were the lowest since 1954.

1963 POTATO INSECT CONTROL CALENDAR*

by

B. J. Landis, N. Sandar and D. H. Brannon

Agricultural Extension Service, Washington State University, Pullman, Washington
Extension Work in Agriculture and Home Economics in Cooperation with the U.S. Department of Agriculture

Month	Pests that treatments may be required for	Possible damage if soil or crop is not treated	Insecticide and amount of active ingredient per acre	Time or frequency of application
October to April	WIREWORMS	Worms kill seed and infest the tubers	DDT 10 lbs.	Apply broadcast and thoroughly mix in top 6-9 inches of soil. Repeat every 5-7 years when worms average 1 per sq. foot. Treat only new land or land not previously treated with soil insecticides within the last 4-5 years.
Spring or fall (two weeks prior to planting)			Ethylene dibromide 83% concentrate 3 gals.	Apply without dilution with equipment constructed to deliver low volume. If such equipment is not available, dilute 3 gals. ethylene dibromide with 7 gals. of stove or fuel oil. Inject with plow sole, chisel, sweep or blade applicator. If chisel equipment is used, spacings should not exceed 12 inches. Do not use row or side dressing application for wireworm control.
June to August	FLEA BETTLES	Adults injure leaves. Worms damage tubers.	DDT 1-1½ lbs. Endosulfan 1 lb. (Thiodan)	Apply to foliage when the adults average 2 per 10 sweeps. Present in Yakima and Kittitas counties.
June to August	APHIDS	Reduce yields, indirectly cause of NET.	Endosulfan 1 lb. (Thiodan) Endrin 9 ozs. Di-Syston 2 lbs.	Start treating foliage about June 15 and continue every 2 weeks to at least August 1. Apply endrin with tractor-drawn equipment. Do not apply endrin within 3 days of harvest. Side dress Di-Syston granules starting May 15 on early plantings and band the granules as later plantings are made. Apply at planting time in western Washington. Do not treat later than 90 days before harvest.

May to June	CUTWORMS	Cut off plants below and above ground.	DDT 2 lbs. Endrin 9 ozs.	Apply to soil and foliage when cutworms first appear.
June to August	LYGUS BUGS	Adults cause top leaves to wilt and die.	DDT 2 lbs. Parathion 12 ozs. Endosulfan 1 lb. (Thiodan)	Apply to foliage as needed; bugs migrate when alfalfa hay is cut or weeds die from drought. Do not apply parathion within 5 days of harvest.
June to October	LEAFHOPPERS	Can reduce yields or spread virus diseases	DDT 1½ lbs. Parathion 12 ozs. Endosulfan 1 lb. (Thiodan)	Start about June 15, or when leafhoppers first appear, and continue every 10 days as needed. Do not apply parathion within 5 days of harvest.
July to October	IRIS WHITEFLY	Larvae weakens plants.	DDT 1½ lbs. Endosulfan 1 lb. (Thiodan)	Start about July 1, or when adults first appear, and continue every 10 days as needed.
July to August	THRIPS	Adults and larvae scar lower sides of leaves.	DDT 1½ lbs.	Apply to foliage when thrips have started noticeable injury.
May to August	COLORADO POTATO BEETLE	Adults & larva strip plants & lower yield.	DDT 1½ lbs. Endosulfan 1 lb. (Thiodan)	Apply to foliage when larvae outnumber egg masses & repeat when necessary. Destroy black nightshade.
July to August	BLISTER BEETLES	Adults ravenously consume the leaves.	DDT 1½ lbs. Parathion 12 ozs.	Apply control measures to foliage quickly--treat only infested areas. Do not apply parathion within 5 days of harvest.
July to September	GRASSHOPPERS	Insects devour leaves & stems.	Toxaphene 1½ lbs.	Apply to adjacent, infested, uncultivated land or 3-foot border of field.
July to August	SPIDER MITES	Mites kill leaves. Web leaves with silk.	Parathion-sulfur ***12 ozs. Trithion 1 lb. Kelthane 1 lb.	Apply to foliage when mites appear or not later than start of damage ***12 ozs. parathion with sulfur dust. Do not apply parathion within 5 days of harvest.

DO NOT FEED TUBERS FROM FIELDS WITH SOIL TREATMENTS OF DDT TO LACTATING COWS.

*USDA registration for aldrin on potatoes has been withdrawn.