

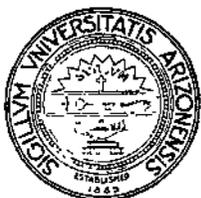
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University of Arizona

COLLEGE OF AGRICULTURE

AGRICULTURAL EXTENSION SERVICE

ARIZONA
BOYS' AND GIRLS' 4-H CLUB WORK
FIFTH YEAR CANNING CLUB



By
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AND
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CLUB EMBLEM

The four-leaf clover with an H on each leaflet is the national Boys' and Girls' 4-H Club emblem. The four H's represent the fourfold development of head, heart, hands, and health.

CLUB PLEDGE

As a true club member I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living for my club, my community, and my country.

CLUB MOTTO

Make the best better

CLUB CREED

The Arizona 4-H Club creed is: I believe in boys' and girls' club work because of the opportunity it gives me to become a useful citizen.

I believe in the training of my head because of the power it will give me to think, to plan, and to reason.

I believe in the training of my hands because it will make me helpful, skillful, and useful.

I believe in the training for health because of the strength it will give me to enjoy life, to resist disease, and to become efficient.

I believe in the great trinity of club work: the school, the home, and achievement.

I believe in my country, in the state of Arizona, and in my responsibility for their development.

To the fulfillment of all these things I am willing to dedicate my service.

4-H CANNING CLUBS

The five years of 4-H club work in canning are designed to give club girls a practical working knowledge of the general field of food preservation, and if possible should be taken in order.

It is highly desirable that all canning club girls should take the first year's work before taking the work of the following years, because the first year's work covers the simpler processes in food preservation. But where it is not possible to obtain fruit and tomatoes, and the girls desiring to form a canning club are of the age required for second year work it would be permissible to take the second year before the first. The remaining years should be taken in the order specified. The third year's work is not absolutely essential but is necessary in order that club girls may receive general instructions that are very important and without which their knowledge of the entire field mapped out for them would be decidedly lacking.

The fifth year's work is not necessary in order to complete the field of canning but it does make a splendid program in canning for older girls who have had the previous work.

More than one year's canning may be carried on during any one year, particularly if the first year's work is the one taken with some other year. The requirements for each year's work are as follows:

REQUIREMENTS FOR FIRST YEAR 4-H CANNING CLUBS

1. Each member will can at least 3 quarts of tomatoes or 3 pints of ripe pimientos.
2. Each member will can 9 quarts of fruit, 3 quarts each of any three varieties.

Exhibits:

1. Three jars of tomatoes or ripe pimientos.
2. One jar each of three varieties of fruit.

REQUIREMENTS FOR SECOND YEAR 4-H CANNING CLUBS

1. Each member will can 9 quarts of vegetables, 3 quarts each of any three varieties.
2. Each member will make 9 pints of vegetables or fruit preserves, 3 pints each of any three varieties.

Exhibits:

1. Three jars of vegetables, three varieties.
2. Three jars of preserves, three varieties.

REQUIREMENTS FOR THIRD YEAR 4-H CANNING CLUBS

1. Each member will can 9 quarts of pickles or relishes, 3 quarts each of any three varieties.
2. Each member will make 9 pints of jams, butters, conserves, or marmalades, 3 pints each of any three varieties.

Exhibits:

1. Three jars pickles or relishes, three varieties.
2. Three jars jams, butters, conserves or marmalades, three varieties.

REQUIREMENTS FOR FOURTH YEAR 4-H CANNING CLUBS

1. Each member will can 9 pints of meat, 1 pint each of any three varieties.
2. Each member will make 9 pints of jelly, having at least three varieties.

Exhibits:

1. Three jars canned meat, three varieties.
2. Three jars jelly, three varieties.

REQUIREMENTS FOR FIFTH YEAR 4-H CANNING CLUBS

Each member will can:

1. Three varieties of fruit.
2. Three varieties of vegetables, including tomatoes and greens.
3. Three varieties of pickles or relishes.
4. Three varieties of preserves, including jams, butters and marmalades.
5. Three varieties of jelly.
6. Three varieties of meats.

Exhibits: (The budget needed for a single individual for one week.)

1. Three jars of vegetables, including tomatoes and greens.
2. Three jars of canned fruit, three varieties.
3. Three jars of canned meat, three varieties.
4. One jar of preserves (Jams, butters, marmalades, or jelly).
5. One jar of pickles or relish.
6. One jar of tomato, fruit, or kraut juice.

ARIZONA BOYS' AND GIRLS' 4-H CANNING WORK

FIFTH YEAR CANNING CLUB

By

FRANCES L. BROWN AND OLIVE G. PICARD

REQUIREMENTS FOR FIFTH YEAR 4-H CANNING CLUBS

1. Prepare a club program of work.
2. Finish with 60 per cent of the enrollment.
3. All work completed with stories and reports in by November 15.

REQUIREMENTS FOR MEMBERS

1. Girls for this work must be at least fifteen years of age.
2. Girls for this work must have completed the first four years of canning club work or its equivalent.
3. Each member shall can:
 - a. Three varieties of fruit.
 - b. Three varieties of vegetables, including tomatoes and greens.
 - c. Three varieties of pickles or relishes.
 - d. Three varieties of preserves, including jams, butters, and marmalades.
 - e. Three varieties of jelly.
 - f. Three varieties of meats.
4. This work must be done by the club member at home and without close supervision, but club member may consult leader or others, and may be advised by her home demonstration agent.
5. Each member shall also make an effort to exhibit at local, county, and state fairs.
6. Each member shall attend at least six club meetings.
7. Each member shall keep records of all work.
8. Each member shall write a story of work and make a final report.

DIRECTIONS FOR WORK

Each member may use any recipe found in the preceding four years or she may use any recipe from any reputable source so that the resulting product will conform to good standards of nutrition and be wholesome and practicable.

EXHIBITS

Each member shall also make an effort to exhibit at local, county, and state fairs. The budget needed for a single individual for one week is as follows: Three jars of vegetables, including tomatoes and greens; three jars of canned fruit, three varieties; three jars of canned meat, three varieties; one jar of preserves (jams, butters, marmalades or jelly); one jar of pickles or relish; one jar of tomato, fruit, or kraut juice.

These products may be exhibited in any standard glass containers. If member cannot make a complete exhibit, she should exhibit as many of the required items as she can.

SCORE CARDS

Each member should practice judging her own work according to the score cards found in the back of this bulletin, and she should if possible repeat her efforts in canning each class until she can produce a high-scoring product.

TIMETABLES

Timetables for processing fruits, meats, and vegetables are given in the back of the bulletin for the convenience of the club member.

THE BUDGET

Definition

Webster defines budget as a stock or a store. Therefore, a family canning budget is the amount of canned foods needed to supply a family during those months when those foods cannot be procured in the fresh state. It is presupposed that canned foods will be supplemented by fresh foods and dried products. A canning budget is made in order to avoid an under- or an oversupply of canned goods. Some products deteriorate in color and flavor upon standing and hence mean lost work.

CONTAINERS

Containers may be any type of glass jar which can be tightly sealed and that is suitable in size for the family. For a family of five, one must use a quart jar to have sufficient for a meal, while for a family of two a pint jar would hold sufficient for a meal.

The club member should use the size of container needed by her family and may exhibit the requisite number of containers from this stock.

Often it becomes a problem to meet the nutrition requirements of the family the year around. Therefore, it is necessary to know these requirements and carefully budget your canning, and can to fulfill these requirements. To have these nutritional requirements, it is necessary to provide the following: Two servings of vegetables daily (besides potatoes) one of these a raw or leafy

vegetable or canned tomatoes; two servings of fruit daily (fresh, canned, or dried); 1 quart milk (children), 1 pint (adults) daily; whole-grain cereals, three times or more a week; meat or meat substitutes (eggs, cheese, fish, dried beans, or peas) daily, (children one egg daily, adults two or three a week); fat (butter, cream, etc.) daily; four to eight glasses of water daily.

The following canning budget allows for one canned vegetable a day. A stored vegetable or an occasional one bought fresh may provide the second vegetable, thus meeting the ideal of two servings for each person daily. Likewise, one serving of canned fruit per day has been planned, which may be supplemented by an additional serving of fresh or stored fruit.

Serving

The word serving for fruits and vegetables means at least one-half cup, and as much more as seems necessary to satisfy the appetite.

APPROXIMATE CANNING BUDGET FOR ONE PERSON FOR ONE WEEK

Products	Use	Amount to can
Greens.....	Two times a week.....	½ pint to last one week
Tomatoes.....	Two times a week.....	½ pint to last one week
Other vegetables.....	Three times a week.....	¾ pint to last one week
Fruits (canned).....	Seven times a week.....	1¾ pint to last one week
Juices (tomato, fruit, kraut).....	Three times a week.....	¾ pint to last one week
Jams, jellies, marmalades.....	Three times a week.....	½ pint to last one week
Pickles and relishes.....	Three times a week.....	½ pint to last one week
Dried fruits.....	Two times a week.....	½ pint to last one week
Meat.....	Two or three times a week.....	¾ pint to last one week

Multiply the above amounts by the number in the family and then by the number of weeks to be provided for in order to get the amount needed in full, as in the following table:

CANNING BUDGET FOR FAMILY OF SIX

Products	Use	Amount to can—time
Greens.....	Two times a week.....	18 quarts for three months
Tomatoes.....	Two times a week.....	64 quarts for eight months
Cabbage—kraut.....	Three times a week.....	18 quarts for three months
Corn, asparagus, beans, peas, okra, soup mixture, beets, carrots (select from group).....	Seven times a week.....	48 quarts for seven months
Berries, cherries, peaches, plums, pears, apricots, rhubarb (select from group).....	Seven times a week.....	144 quarts for six months

Fruit, tomato, or kraut juice.....	Three times a week.....	9 quarts for six months
Jellies, jam, marmalades.....	Three times a week.....	36 quarts for ten months
Pickles and relishes.....	Three times a week.....	36 quarts for ten months
Dried fruits.....	Two times a week.....	36 pounds for ten months

(Table taken from "Home Canning in Maryland," Bulletin No. 55)

SCORE CARD FOR CANNED FRUITS

	Per cent
Pack—full, attractive, practical.....	20
Liquid—clean, clear, enough to cover for fruits and tomatoes....	10
Color—natural color, not faded or unnaturally bright.....	20
Quality of products—distinct, uniform pieces, well prepared, firm, keeping original shape.....	40
Appearance of container—clean, suitable container, clear glass, neat label.....	10
Total—perfect score.....	100

SCORE CARD FOR CANNED VEGETABLES

	Per cent
Pack—full, attractive, practical.....	20
Liquid—clean, clear, up to the top for vegetables.....	10
Color—natural color, not faded or unnaturally bright.....	20
Quality of product—distinct, uniform pieces, well prepared, firm, keeping original shape.....	40
Appearance of container—clean, suitable container, clear glass, neat label.....	10
Total—perfect score.....	100

SCORE CARD FOR PRESERVES

	Per cent
Pack—full, attractive, practical.....	20
Liquid—clean, clear, heavy; may be a jelly.....	10
Color—natural color, not faded or unnaturally bright, but clear or with dull shine.....	20
Quality of products—pieces of fruit uniform in size, color, ripe- ness, consistency, keeping shape—not mashed or crushed....	40
Appearance of container—clear, suitable container, clear glass, neat label.....	10
Total—perfect score.....	100

SCORE CARD FOR JELLY

	Per cent
Pack—full, attractive, practical.....	10
Color—natural, characteristic of fruit used, sparkling, bright, not dull, faded, or dark.....	20
Quality of product Consistency—should hold shape and quiver, should cut easily.	

Clearness—transparent or translucent, not cloudy or containing crystals or pulp, or fiber.	
Condition—not weeping or moldy or fermented.	
Tenderness—should cut easily and retain shape.	
Bloom or shine—should be sparkling or glistening.....	40
Flavor—natural, fruity.....	20
Appearance of container—clean, suitable, clear glass, with neat label.....	10
Total—perfect score.....	100

SCORE CARD FOR JAMS, BUTTERS, MARMALADES, AND CONSERVES

	Per cent
Pack—full, attractive, practical.....	20
Color—clear, natural color, not faded, browned, or darkened, or unnaturally bright.....	20
Juice or liquid—clean, clear, heavy, may be a jelly.....	10
Consistency and texture—uniform, smooth, clear, translucent..	40
Appearance of container—clean, suitable container, clear glass, neat label.....	10
Total—perfect score.....	100

SCORE CARD FOR PICKLES AND RELISHES

	Per cent
Pack—full, attractive, practical.....	20
Liquid—clean, clear, sparkling.....	10
Color—natural, characteristic, not faded or unnaturally bright..	20
Quality of product—uniform in size, color, shape, consistency, plump not shrunken, crisp yet tender, not soft.....	40
Appearance of container—clear suitable container, clean, neatly labeled.....	10
Total—perfect score.....	100

SCORE CARD FOR CATSUP

	Per cent
Pack—full, attractive, practical.....	20
Color—characteristic, natural, bright not dull.....	20
Quality of product—fine grained, smooth, thick, not solid or watery.....	50
Appearance of container—clear, suitable container, clean, neatly labeled.....	10
Total—perfect score.....	100

SCORE CARD FOR CANNED MEAT

	Per cent
Pack—full, attractive, practical.....	20
Liquid—if any, clean, clear, jellied.....	10
Color—natural, characteristic of the product.....	20
Quality of product—distinct, uniform portions, well prepared, keeping original shape.....	40
Appearance of container—clean, suitable container, clear glass, neat label.....	10
Total—perfect score.....	100

SCORE CARD FOR FRUIT JUICES

	Per cent
Pack—not full.....	10
Color—clear, natural, not faded.....	20
Quality of product—uniform consistency throughout.....	40
Flavor—(when opened) natural, pleasing, unfermented, appetizing	20
Appearance of container—clean, clear container, neatly labeled	10
Total—perfect score	100

JUICES

Tomato Juice

Select firm, ripe tomatoes. Wash well and drain. Cut into sections. Simmer in small quantities at a time until just soft enough to put through a fine sieve. Bring to boiling, pour into sterilized jars and seal. (U.S.D.A. Farmers' Bulletin 1471.)

Fruit Juices

(Apple cider, grapes, currant, blackberry, cherry, raspberry, peach.) Method I—Use very ripe fruit. Crush the fruit and heat slowly until it begins to boil. Remove from the stove, allow to settle and strain through a double cheesecloth. Add sugar (1 cup to 1 gallon of juice) to the juice. Fill clean, sterilized bottles with the hot juice, cork the bottles, and process. When processing is completed tighten the corks and seal by dipping in hot sealing wax or paraffin.

Method II—Crush the fruit and strain the juice. Allow it to settle for several hours then drain and add the sugar (1 cup to 1 gallon of juice). Pour the juice into sterilized bottles, process, and seal as in Method I. This method is used for the best quality of berries and grapes. Do not add sugar to the juice if it is later to be used for jelly making. (University of Maryland Extension Circular No. 55.)

Fruit Juices

(Citrus.) Extract the juice. Heat the extracted juice to 180 degrees F. in open kettles of either aluminum or enamelware. Sugar may be added in the proportion of one cup to a gallon of juice. While at this temperature, strain into sterilized bottles or glass jars, filling to overflowing and capping or adjusting tops at once to prevent the admission of air. Containers are then submerged in a water bath and held for a sterilization period of thirty minutes at 180 degrees F. Cover the tops of the bottles with at least $\frac{1}{2}$ inch of water. Lemon and orange juice are better combined with other juices as they turn bitter with even the shortest period of sterilization. When citrus fruits are processed in glass jars and carefully wrapped in paper for storage, the product is superior to that processed in containers of pop bottle type. High temperatures in preheating or processing cause bitterness in the canned citrus and cause a residue in the bottom of the containers.

(Prepared by Grace Ryan, H. D. A., Maricopa County.) If the pulp is removed from the peel and the white membranous skin before the juice is extracted, the product after processing will give no taste of bitterness. However this takes more time.

TIMETABLE FOR PROCESSING VEGETABLES AND FRUITS

Product	Processed—boiler with false bottom	Product	Processed—boiler with false bottom
Vegetables:		Fruits:	
Pimientos	40 min.*	Apples	15 min.*
Tomatoes	45 min.*	Apricots	15 min.*
Tomato juice (precooked)	5 min.*	Berries	20 min.*
Kraut juice	30 min. at 180° F.	Cherries	25 min.*
Fruit juices:		Currants	20 min.*
Cider	30 min. at 180° F.	Figs	5 min.*
Grape	30 min. at 180° F.	Gooseberries	20 min.*
Raspberry	30 min. at 180° F.	Grapefruit	5 min.
Citrus juice	30 min. at 180° F.	Grapes	20 min.*
		Oranges	5 min.
		Peaches	15 min.*
		Pears	20 min.*
		Plums	20 min.*
		Rhubarb	5 min.*

*From U. S. Department of Agriculture Farmers' Bulletin No. 1471, Revised 1933.

Note 1—This time given for processing in boiling water applies only to altitudes of 1,000 feet or less. For higher altitudes than this increase the period of time 10 per cent for each 500 feet. (Farmers' Bulletin No. 1471, Revised 1933, Page 18.)

Note 2—The time given is for quart jars. Pints may be given same without harm to contents.

TIMETABLE FOR CANNING NONACID VEGETABLES WITH THE PRESSURE COOKER

Product	Process period in pressure canner					
	Quart glass jars			Pint glass jars		
	Time in minutes	Pressure or temperature (lbs.) (F.)		Time in minutes	Pressure or temperature (lbs.) (F.)	
Asparagus	35	10	240	30	10	240
Beans, Lima	55	10	240	50	10	240

**TIMETABLE FOR CANNING NONACID VEGETABLES WITH THE
PRESSURE COOKER—Continued**

Product	Process period in pressure canner					
	Quart glass jars			Pint glass jars		
	Time in minutes	Pressure or temperature (lbs.) (F.)		Time in minutes	Pressure or temperature (lbs.) (F.)	
Beans, string	35	10	240	30	10	240
Baby beets	35	10	240	30	10	240
Carrots	35	10	240	30	10	240
Cauliflower	35	10	240	30	10	240
Corn	80	15	250	75	15	250
Greens, including spinach	65	15	250	60	15	250
Okra	40	10	240	35	10	240
Peas, green	55	10	240	45	10	240
Peas, black eyed	55	10	240	50	10	240
Peppers, bell	30	5		25	5	
Pumpkin	75	15	250	60	15	250
Squash	75	15	250	60	15	250
Sweet potatoes	120	10	240	95	10	240

Note: The above table was taken from U.S.D.A. Farmers' Bulletin 1471 (Revised 1933).

PROCESSING

After preheating, packing, and sealing, the containers of meat should be immediately processed, or heated, in the steam pressure cooker as directed below. The time periods given apply to meat which is steaming hot, or about 170 degrees F. when packed or sealed.

For beef, veal, pork, mutton, and lamb:

Pint glass jars, eighty-five minutes at 15 pounds pressure, 250 degrees F.

Quart glass jars, one hundred twenty minutes at 15 pounds pressure, or 250 degrees F.

For canning chicken:

With bone:

Pint glass jars, sixty-five minutes at 15 pounds pressure, or 250 degrees F.

Quart glass jars, seventy-five minutes at 15 pounds pressure, or 250 degrees F.

Boned chicken:

Pint glass jars, eighty-five minutes at 15 pounds pressure, or 250 degrees F.

Quart glass jars, one hundred twenty minutes at 15 pounds pressure, or 250 degrees F.

For canning fish:

One hundred minutes at 10 pounds pressure, or 240 degrees F.

COOLING

After processing glass jars, allow the pressure gauge to reach zero before opening the petcock, then open it gradually so there is no sudden outrush of steam. Complete the seal on glass jars, and place them in the open air, but protected from drafts, until cooled.

TIMETABLE SHOWING INCREASED TIME FOR DIFFERENT
ALTITUDES IN ARIZONA
WATER-BATH METHOD

Place	Elevation	Boiling times at given elevations for varying times at sea level				
		5 min.	15 min.	20 min.	25 min.	45 min.
Ajo	1,770	6.77	20.3	26.1	33.8	60.9
Alpine	8,500	13.5	40.5	54.0	67.5	121.5
Ashfork	5,160	10.2	30.5	40.8	51.0	91.8
Benson	3,523	8.5	25.5	34.0	42.5	76.5
Bisbee	5,425	10.4	31.2	41.6	52.0	93.6
Bouse	1,100	6.1	18.3	24.4	30.5	54.9
Bowie	3,756	8.7	26.1	34.8	43.5	78.3
Buckeye	980	6.0	18.0	24.0	30.0	54.0
Camel Back	1,249	6.2	18.6	24.8	31.0	55.8
Canille	5,255	10.3	30.9	41.2	51.5	92.7
Casa Grande	1,400	6.4	19.2	25.6	32.0	57.6
Chandler	1,213	6.2	18.6	24.8	31.0	55.8
Clemenceau	3,460	8.5	25.5	34.0	42.5	76.5
Clifton	3,465	8.5	25.5	34.0	42.5	76.5
Cochise Stronghold	4,950	9.9	29.7	39.6	49.5	89.1
Douglas	3,930	8.9	26.7	35.6	44.5	80.1
Fairbank	3,862	8.86	26.6	35.4	44.3	80.0
Flagstaff	6,907	11.9	35.7	47.6	59.5	107.1
Florence	1,500	6.5	19.5	26.0	32.5	58.5
Ft. Apache	5,300	10.3	30.9	41.2	51.5	92.7
Ft. Defiance	6,950	11.95	35.8	47.8	59.7	107.5
Ganado	6,840	11.8	35.4	47.2	59.0	106.2
Gila Bend	737	5.7	17.1	22.8	28.5	51.3
Globe	3,440	8.4	25.2	33.6	42.0	75.6
Grand Canyon	6,866	11.86	35.6	47.4	59.3	106.7
Holbrook	5,069	10.1	30.3	40.4	50.5	90.9
Jerome	5,250	10.2	30.6	40.8	51.0	91.8
Kingman	3,266	8.3	24.9	33.2	41.5	74.7
Litchfield Park	1,180	6.2	18.6	24.8	31.0	55.8
Maricopa	1,186	6.2	18.6	24.8	31.0	55.8
Marinette	1,150	6.1	18.3	24.4	30.5	54.9
McNary	7,251	12.2	36.6	48.8	61.0	109.8
Mesa	1,245	6.2	18.6	24.8	31.0	55.8

TIMETABLE SHOWING INCREASED TIME FOR DIFFERENT
ALTITUDES IN ARIZONA
WATER-BATH METHOD—*Continued*

Place	Elevation	Boiling times at given elevations for varying times at sea level				
		5 min.	15 min.	20 min.	25 min.	45 min.
Miami	3,603	8.6	25.8	34.4	43.0	77.4
Mohawk	538	5.4	16.2	21.6	27.0	48.6
Mormon Lake	7,000	12.0	36.0	48.0	60.0	108.0
Nogales	3,839	8.8	26.4	35.2	44.0	79.2
Oracle	4,522	9.5	28.5	38.0	47.5	85.5
Parker	350	5.3	15.9	21.2	26.5	47.7
Payson	4,906	9.9	29.7	39.6	49.5	89.1
Phoenix	1,108	6.1	18.3	24.4	30.5	54.9
Pinedale	6,500	11.5	34.5	46.0	57.5	103.5
Prescott	5,389	10.4	31.2	41.6	52.0	93.6
Quartzsite	871	5.9	17.7	23.6	29.5	53.1
Redrock	1,856	6.9	20.7	27.6	34.5	62.1
Roll	257	5.3	15.9	21.2	26.5	47.7
Roosevelt (Gila)	2,275	7.3	21.9	29.2	36.5	65.7
Rucker Canyon	5,634	10.6	31.8	42.4	53.0	95.4
Sacaton	1,280	6.3	18.9	25.2	31.5	56.7
St. Johns	5,650	10.6	31.8	42.4	53.0	95.4
Salome	1,775	6.8	20.4	27.2	34.0	61.2
Seligman	5,219	10.2	30.6	40.8	51.0	91.8
Snowflake	5,644	10.6	31.8	42.4	53.0	95.4
San Simon	3,609	8.6	25.8	34.4	43.0	77.4
Springerville	6,822	11.8	35.4	47.2	59.0	106.2
Superior	3,000	8.0	24.0	32.0	40.0	72.0
Tempe	1,159	6.2	18.6	24.8	31.0	55.8
Thatcher	2,800	7.8	23.4	31.2	39.0	70.2
Tombstone	4,580	9.6	28.8	38.4	48.0	86.4
Tuba City	4,500	9.5	28.5	38.0	47.5	85.5
Tucson	2,423	7.4	22.2	29.6	37.0	66.6
Vail	3,241	8.2	24.6	32.8	41.0	73.8
Wellton	225	5.2	15.6	20.8	26.0	46.8
Wickenburg	2,072	7.1	21.3	28.4	35.5	63.9
Willcox	4,200	9.2	27.6	36.8	46.0	82.8
Williams	6,750	11.7	35.1	46.8	58.5	105.3
Winslow	4,848	9.8	29.4	39.2	49.0	88.2
Yuma Valley	110	5.1	15.3	20.4	25.5	45.9

Note: For other communities not listed here increase the processing time 20 per cent for every 1,000 feet increase in elevation above sea level.

TABLE SHOWING THE CHANGES NECESSARY FOR GAUGE PRESSURES AT DIFFERENT ALTITUDES IN ARIZONA

Place	Elevation	Pounds necessary for gauge pressure at given elevations	
		10 lb. pressure	15 lb. pressure
Ajo	1,770	10.88	15.88
Alpine	8,500	14.25	19.25
Ashfork	5,160	12.6	17.6
Benson	3,523	11.76	16.76
Bisbee	5,425	12.7	17.7
Bouse	1,100	10.55	15.55
Bowie	3,756	11.88	16.88
Buckeye	980	10.49	15.49
Camel Back	1,249	10.62	15.62
Canille	5,255	12.62	17.62
Casa Grande	1,400	10.7	15.7
Chandler	1,213	10.6	15.6
Clemenceau	3,460	11.7	16.7
Clifton	3,465	11.7	16.7
Cochise Stronghold	4,950	12.47	17.47
Douglas	3,930	11.96	16.96
Fairbank	3,862	11.93	16.93
Flagstaff	6,907	13.45	18.45
Florence	1,500	10.75	15.75
Ft. Apache	5,300	12.65	17.65
Ft. Defiance	6,950	13.47	18.47
Ganado	6,840	13.42	18.42
Gila Bend	737	10.37	15.37
Globe	3,440	11.72	16.72
Grand Canyon	6,866	13.43	18.43
Holbrook	5,069	12.53	17.53
Jerome	5,250	12.62	17.62
Kingman	3,266	11.63	16.63
Litchfield Park	1,180	10.59	15.59
Maricopa	1,186	10.59	15.59
Marinette	1,150	10.57	15.57
McNary	7,251	13.62	18.62
Mesa	1,245	10.62	15.62
Miami	3,603	11.80	16.80
Mohawk	538	10.27	15.27
Morman Lake	7,000	13.5	18.5
Nogales	3,839	11.92	16.92
Oracle	4,522	12.26	17.26
Parker	350	10.17	15.17
Payson	4,906	12.45	17.45
Phoenix	1,108	10.55	15.55
Pinedale	6,500	13.25	18.25
Prescott	5,389	12.69	17.69
Quartzsite	871	10.43	15.43
Redrock	1,856	10.93	15.93
Roll	257	10.13	15.13
Roosevelt (Gila)	2,275	11.14	16.14
Rucker Canyon	5,634	12.82	17.82
Sacaton	1,280	10.64	15.64
St. Johns	5,650	12.82	17.82
Salome	1,775	10.89	15.89
Seligman	5,219	12.61	17.61

TABLE SHOWING THE CHANGES NECESSARY FOR GAUGE PRESSURES AT DIFFERENT ALTITUDES IN ARIZONA—*Continued*

Place	Elevation	Pounds necessary for gauge pressure at given elevations	
		10 lb. pressure	15 lb. pressure
Snowflake	5,644	12.82	17.82
San Simon	3,609	11.80	16.80
Springerville	6,822	13.41	18.41
Superior	3,000	11.50	16.50
Tempe	1,159	10.58	15.58
Thatcher	2,800	11.40	16.40
Tombstone	4,580	12.29	17.29
Tuba City	4,500	12.25	17.25
Tucson	2,423	11.21	16.21
Vail	3,241	11.62	16.62
Wellton	225	10.11	15.11
Wickenburg	2,072	11.04	16.04
Willcox	4,200	12.10	17.10
Williams	6,750	13.37	18.37
Winslow	4,848	12.42	17.42
Yuma Valley	110	10.05	15.05

Note: For other communities not listed here, add $\frac{1}{2}$ pound pressure for every 1,000 feet increase in elevation above sea level.