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Mother-Daughter Gardening and Canning Clubs

Directions for Gardening and Conduct of Clubs



Grace Holt and Her Exhibit
Montana's Champion Cleared \$148 from 1-10 Acre.

By

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ORGANIZATION OF CLUB WORK

PURPOSE OF CLUB WORK.

The purpose of club work is to teach practical agriculture and home economics through the schools to boys and girls 10-18 years of age. These clubs are conducted by a local leader who may be a live teacher, practical farmer, housewife or business man. This local leader arranges meetings, plans prizes and local contests, and tries to secure permanent community interest. Agriculture and home economics cannot be taught from a text book alone. A school garden or school plot is as yet out of the question in Montana, and even if practicable cannot take the place of the club acre or household project.

Club work has for its object one definite limited piece of work each year. In Montana, in 1916, as in 1915, there will be four club projects: (1) Boys' Potato Clubs, (2) Boys' Corn Clubs, (3) Girls' Gardening and Canning Clubs, (4) Mother-Daughter Vacation Canning Clubs.

A Club Must Have a Definite Ideal. In years past boys and girls grew corn, potatoes or canned vegetables merely to compete for a prize or for an exhibit. In 1915 definite agricultural and home projects were worked out such as: Co-operative marketing, grading potatoes, raising 4-H Brand Seed Corn and Seed Potatoes, earning money at home by gardening, etc. Grace and Opal Holt of Deer Lodge, earned \$1.08 and \$1.48 from a 1-10 acre garden; 25 boys cleared \$15 from 1-8 acre of potatoes; Ferd and Ernest Daly cleared \$57 each from 1 acre of corn; 10 boys sold seed corn, 4-H Brand, for \$3.50 per bushel; 15 boys sold 4-H Brand Seed Potatoes. 4-H Brand is named for the 4-H Brand of Education—Head, Heart, Hands and Health.

A Club Member is a Farm and Home Demonstrator.—Club members keep records of variety of seed, cost of planting, cultivating and all operations on a record blank furnished upon application by the State Leader. They keep records all summer of amount and value of produce used at home and sold. From these records they calculate the profit per 1-8 acre or 1 acre of potatoes, 1 acre of corn and 1-10 acre garden and on canned products. These records are certified to by disinterested Witnesses who are not relatives of club members. When a girl makes a high yield, or a great profit, she can then prove by figures and can demonstrate in a public meet-

ing or by a newspaper report HOW she has made her money and HOW she has canned her vegetables.

PRELIMINARY WORK.

First explain to the girls the meaning of a club and tell them what it would mean to them to have an organization. If you succeed in working up enough interest, plan to reserve some Friday afternoon after recess time for organization. Have the girls invite their mothers so that they will understand what club work means and will keep up the interest at home during the summer months in the gardening and canning work. Otherwise unless you remain in the community all summer as leader and can call meetings, it will be hard to get results for the fall exhibit and program at the school. Get the mothers to help the girls during the summer by interest and encouragement. If the mothers cannot come to these meetings it will pay you to visit them, explain club work and get them to promise to keep up the interest of the children in what they have begun.

First Meeting for Organization—Write upon the board the following and get each prospective club member to sign it:

Pledge: I hereby pledge myself to:

1. Study carefully all letters and bulletins of instructions sent by my State Leader.
2. Carry out these instructions to the best of my ability.
3. Attend club meetings and take part in the programs.
4. Keep carefully a memorandum book of my club work.
5. Render all necessary reports.

Then write the names of these members, who must be 10-18 years of age, upon the enrollment blanks furnished you, sending one copy at once to Miss Augusta D. Evans, State Leader of Club Work, Bozeman, Montana, and the other to the county superintendent of schools. Give name and address of each member and of the parents.

Instructions during the summer months, which will be by monthly letters, will be mailed to the club members to the addresses given on the enrollment blanks.

Instructions sent while school is in session will be mailed for distribution to the teacher or to the leader in charge of the club. Please state up to what date you wish instructions sent to the local leader.

Then elect the president and secretary by ballot and indicate who they are on the enrollment blank. Set a date for the next

meeting and assign a lesson on variety of seed corn, potatoes, and garden seeds. Have club members find out for discussion at the next meeting the varieties considered best for your locality. Send enrollment blank, properly filled out, at once to State Leader.

PROGRAM FOR MOTHER-DAUGHTER GARDENING CLUBS.

Meeting II.

1. Roll call and reading of minutes of last meeting by secretary.
2. Discussion of size of garden—1-10 acre for town gardens and 1-2 acre for ranch gardens (See diagram with this program, planned for horse cultivation to save labor and time).
3. Assign for meeting III Calculation of Amount of Seed necessary for 1-10 acre and 1-2 acre gardens. Use seed catalogue. Have secretary write for seed catalogue to some western seed house.
4. Announcements—set date for next meeting—invite mothers.

Meeting III.

1. Roll call and reading of minutes of last meeting by secretary.
2. Final decision of size of garden—Calculation of cost of the seed.
3. Discuss buying of seed cooperatively from one seed house for economy and to get good varieties (for varieties for Montana see circular on Garden Suggestions for Girls' Club Members page 4.)
4. Assign lesson on "How to Prepare Soil for Seeding." Have members find out how they are to get seed bed prepared—who is to help them. The leader may have to interest some parents here.
5. Announcement of date of next meeting—Plan to secure some mother who has raised a good garden to talk to the club on "How I Prepare My Seed Bed."

Meeting IV.

1. Roll call and reading of minutes of last meeting by secretary.
2. Lesson on "How to Prepare Seed Bed." Each member must take notes to be written up and handed in at Meeting V.
3. Assign lesson on "Study of Garden Diagram." Notice part of garden is planted to early vegetables. The part left should be kept cultivated to keep down the weeds and to preserve the moisture.
4. Announcement—Plan to have Last Day School Exercises to interest parents in club work. See each personally to get them out.

Meeting V.—Last Day of School, at Closing Exercises.

1. Invite parents—Interest them in club work.
2. Plan Fall exhibit of vegetables at school house.
3. Plan prizes for best exhibits, greatest profit, best compositions on "How I Grew My Crop."
4. Plan to have a basket lunch and play festival for September or October 1916.

From now on club work and meetings can be most successfully managed through Mother-Daughter clubs—one mother appointed as leader—meetings to be held at homes.

PROGRAMS FOR MOTHER-DAUGHTER VACATION CANNING CLUBS.

JUNE—Meeting I.

One meeting a month if possible at homes of various members, beginning alphabetically.

Discuss Mother-Daughter Canning Club Report Blank, how to keep record of vegetable used in the home, the vegetables sold, and the vegetables canned. Interest members in each others' gardens—visits, exchange of plants, etc.

JULY—Meeting II.

a. Discuss time and place for a canning demonstration by the State Leader. If you have a county agriculturist (there is a county agriculturist in Fergus, Cascade, Hill, Flathead, Custer, Dawson and Teton counties) write to him and arrange to bring out the State Leader. Discuss plan to advertise this demonstration, bringing in all kinds of vegetables to can.

b. Plan for a basket lunch on this day and a play festival in the afternoon.

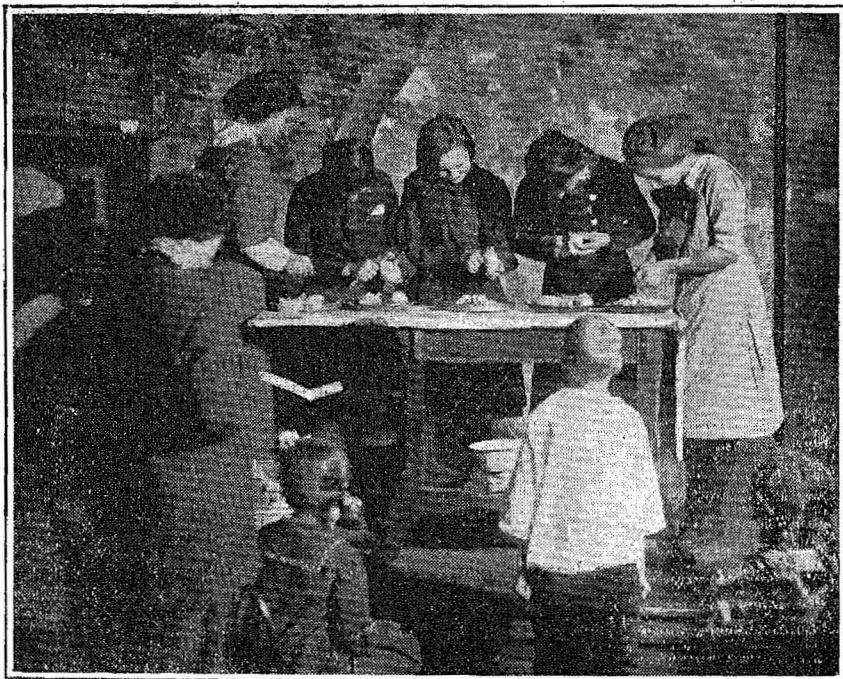
The State Leader will use wash boiler and also steam pressure outfits to show saving in time and labor of canning. Everybody come and bring aprons, jars and vegetables, prepared to can. Invite the men and boys. They are usually interested in the canning outfits and canning in tin.

AUGUST—Meeting III.

a. Plan a Fall Local Fair at the school for September and October. Prizes for the best exhibits of vegetables, canned vegetables, greatest profit on garden, made by mother and daughter. Have a girls' canning contest, a boys' and girls' potato race, a potato recipe contest, a spelling bee, using terms pertaining to gardening and canning.

b. Plan to exhibit at the county contest if you have one, also the state contest.

c. Information on contests and rules for judging will be furnished by the State Leader upon request.



Girls' Potato Paring Contest—Wibaux Play Festival and Club Fair, Nov. 13, 1915.

DIRECTIONS FOR SIZE OF GARDEN—HOW TO PLANT GARDEN, ETC.

Size of Garden—For towns, a 1-10 acre garden (43.5 ft. by 100 ft.) equivalent to a city lot is the required size. In this size garden the rows vary from 1 foot to $2\frac{1}{2}$ feet for cultivation by hoe or garden cultivator. Two or three plantings may be made in a season if the space is used after early peas: lettuce, radishes, etc., for quick growing vegetables like beets, carrots, etc., for a second planting of lettuce or radishes or for the planting of celery or tomato plants.

The 1-10 acre garden is arranged so that the early vegetables and those of similar cultivation can be planted first up to row 9. The space from row 9 to 19 can thus be kept cultivated to keep down weeds until the time for vegetables to be planted later like beans, corn and cabbage, etc. Spinach and chard are desirable vegetables.

DIAGRAM—1/10-ACRE GARDEN.

FOR

GIRLS, GARDENING & CANNING CLUBS—43.5 ft. by 100 ft.

Feet
Apart

1—Spinach	Lettuce	Radishes	—2
2—			—2½
Peas			—2½
3—			—2½
4—Turnips			—1½
5—Beets			—1½
6—Carrots			—1½
7—Parsnips			—1½
8—Salsify			—1½
9—Swiss Chard			—3
10—Cabbage			—3
11—Cauliflower			—3
12—			—1½
13—Bush Beans			—1½
14—			—2½
15—			—2½
16—Sweet Corn			—2½
17—			—2½
18—Tomatoes			—2½
19—			—2

Early Peas—Alaska, Gradus.

Second Early Peas—Abundance, Advancer.

Early Cabbage—Early Jersey Wakefield, Early
Winnegstadt.

Late Cabbage—Danish Ballhead, Danish Roundhead,
Late Flat Dutch.

Early Cauliflower—Extra Early Dwarf Erfurt, Dry Weather
Early Snowball.

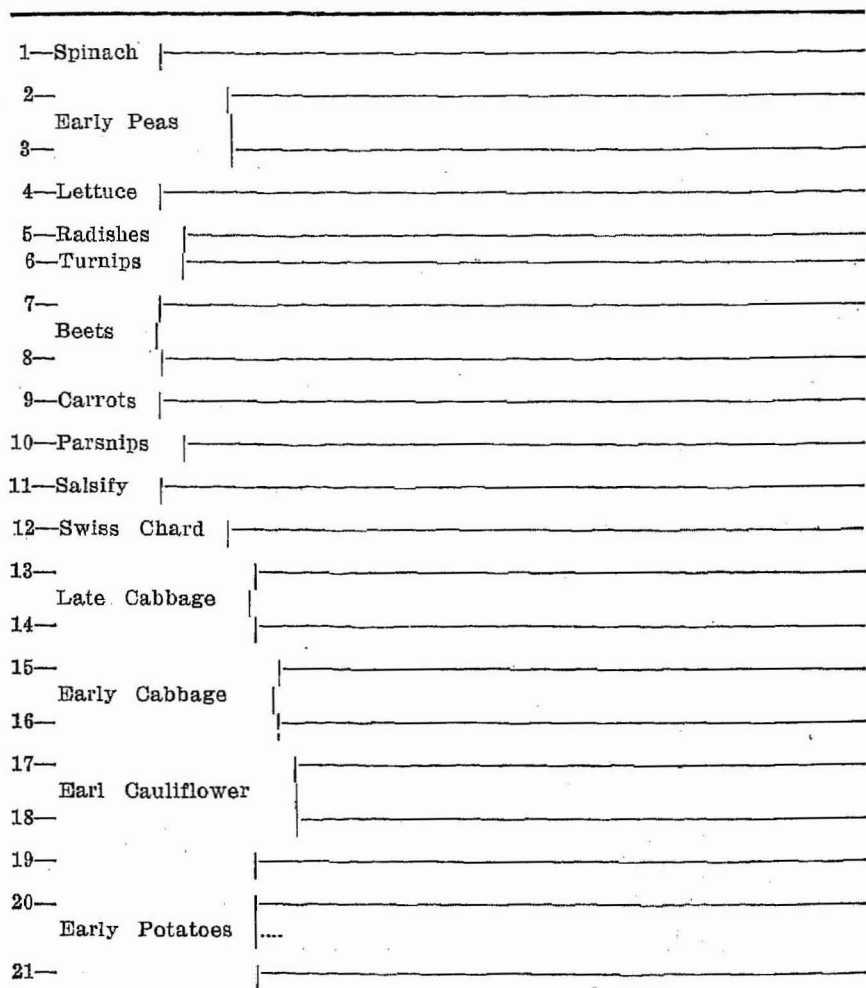
Rush Beans—Davis White Way, Extra Early, Refugee, Red
Valentine, Mammoth Stringless
(greenpod)

For home gardens $\frac{1}{2}$ acre is about the best size as it is cared for with the least amount of labor. The rows are 3 feet apart for horse cultivation. In this way a great deal of laborious hoeing can be avoided. In Montana, land is cheap but labor is expensive.

This garden is arranged so that the first early plantings reach to row 12. The remainder of the garden can thus be kept cultivated and free from weeds until it comes time to plant beans, cabbage and cauliflower plants, etc.

DIAGRAM OF HOME VEGETABLE GARDEN

100 feet by 210 feet—rows 3 feet apart.



22—		
23—	Early String Beans	
24—		
25—	Second Early String Beans	
26—		
27—		
28—		
29—	Sweet Corn	
30—		
31—		
31—		
23—	Tomatoes	

Early Peas—Alaska, Gradus. Second Early—Abundance, Adancer.

Early Cabbage—Early Jersey, Wakefield, Early Winnegstadt.

Late Cabbage—Danish Ballhead, Late Flat Dutch.

Early Cauliflower—Extra Early Dwarf Erfurt, Dry Weather, Early Snowball.

Early String Beans—Davis White Wax Extra Early Refugee.

Second Early String Beans—Red Valentine, Mammoth Stringless.

SEEDS AND SEEDING.

Order your seeds early. Order good seeds from reliable seedsmen, of standard varieties rather than novelties. Early varieties should be planted in most parts of the state as the growing season is short. The varieties recommended have been grown on the station grounds at Bozeman and are adapted to most parts of the state. The amount of seed to order can be determined by consulting data given with the various crops. Usually one package, or one ounce, will be enough.

Plant seeds deep enough to be in moist earth. Seeds can be planted deeper in light soils than in heavy soils. Firm the soil about the seeds well. If seeds are planted with a drill, the machine will firm the soil.

VARIETIES SUITED TO MONTANA

PEAS.

Peas should be planted early in the spring as soon as the soil can be put in condition. Plant in rows 18 inches apart if cultivated by hand, and 3 feet apart if cultivated by horse. Seeds should be about 1½ inches apart in the row and 2 or 3 inches deep. The seed required for 100 feet of drill is from 1 to 2 pints.

The pods should be picked when well filled with peas and before the peas have begun to turn dry and hard.

BEANS.

Snap or string beans should be planted when danger of frost is over, say the latter part of May. Plant in rows 2 or 3 inches deep, rows 18 or 36 inches apart, and seeds 1 inch apart.

The pods should be picked when tender and before the seeds get big. For every 100 feet of row use about 1 quart of seed.

BEETS.

Beets should be sown in rows 1 inch deep and 18 inches apart, early in the spring. They should be thinned to about 1 to 3 inches apart. One hundred feet of row will require about 2 ounces of seed.

CHARD.

Swiss Chard is grown the same as beets. The leaves and leaf stalks are used as greens. Excellent food because of high mineral content.

CARROTS.

Carrots should be planted early in the spring, as soon as the land is in good condition. They should be sown in rows about 18 inches apart and $\frac{1}{2}$ inch deep, and thinned to 1 inch apart after they have become fairly established. The seed required is about $\frac{1}{2}$ ounce to 100 feet of drill.

Varieties—Oxheart, Chantenay, Danvers Half Long.

Carrots used when young and tender are most palatable. If canned when young they are far superior to old carrots carried through the winter.

CAULIFLOWER.

Cauliflower should be started in boxes in the house or hotbed. The seed should be sown in rows about 1 inch apart and $\frac{1}{2}$ inch deep. When the third or fourth leaves are well started the plants should be transplanted 2 inches apart. Several days before setting out in the field the gardener should begin to harden his plants off. When freezing weather has passed the plants are set out in rows about 30 inches apart and about 18 inches apart in the row. When the heads begin to form, some of the leaves of the plant should be brought together over the head and tied with string. One-third of an ounce of seed is required to 100 feet of row; 1 ounce to 2500 plants.

CUCUMBERS.

Cucumbers should be planted when danger of frost is over in hills 4 feet apart each way. Six to eight seeds should be planted 1-2 inch deep in each hill. If all the seeds grow the plant can be thinned, leaving 2 or 3 in a hill. For fertilizing cucumbers, better results will be obtained if a shovel of well rotted manure can be thoroughly mixed with the soil in the hill. The fruits may be picked when they are small, 1 1-2 to 2 inches for pickles, or when 5 or 6 inches long for slicing. They should be picked before turning white or yellow. For best results pick daily. The seed required is from 1 to 2 ounces for 100 hills.

Varieties—Davis Perfect, Long Green, for slicing; Short Green for pickles and slicing.

ONIONS.

Onion seed should be planted as early as possible in the spring in drills 14 inches apart and should be covered about 1-2 to 1 inch

deep. After the onions are up they should be thinned to about 2 inches apart. About 1-2 ounce of seed will be required for every 100 feet of row. Onions may also be raised from sets planted 2 or 3 inches apart and about 1½ to 2 inches deep.

Varieties—Large Red Weathersfield, Yellow Globe Danvers, Australian Brown, Southport White Globe or Cracker.

PEPPERS.

The culture of peppers is about the same as for tomatoes. Distances for planting are: rows 30 inches apart, plants 18 inches apart in the row. The seed required is 1 ounce to 1000 plants.

Varieties—Ruby King (large, sweet), Red Chili (small, hot),

SPINACH.

Spinach should be planted early in the spring in rows 14 inches apart. The plants should be thinned to 4 or 6 inches apart. The leaves may be picked when they have reached the most convenient size or the entire plant may be pulled. Seed required; one ounce to 100 feet of drill. A vegetable of high iron content and a valuable tonic.

Variety—New Zealand.

TOMATOES.

Tomatoes should be started in boxes in the house or hotbeds about March 1st. The seed should be sown in shallow rows about 1 inch apart and about 1-4 inch deep. When the first true leaf is well started, they should be transplanted into other boxes 2 inches apart. When they begin to crowd they should be transplanted 3 or 4 inches apart, or into 3 or 4-inch pots, strawberry boxes or tin cans. These will permit transplanting into the field without greatly disturbing the root system. Harden the plants before setting in the field. Set out in field, after danger of frost is past, 3 feet apart each way. If they are to be pruned to single stems, and staked, they may be set 18 inches apart. In pruning to a single stem pinch off all side branches (not blossoms) when they appear. Tie to stakes with string or cloth tightly around the stake and loosely about the plant. Stakes should be 5 or 6 feet long. The seed required is 1 ounce to 1,500 plants.

Varieties—Earliana, Bonny Best, Chalks Early Jewel.

PREPARATION OF THE SOIL.

The land should be plowed preferably in the fall. If land thus prepared is not available, early spring plowing will do. It should be harrowed as soon as dry enough in the spring. If plowed in the spring it should be harrowed immediately, before any lumps have time to harden. Unless the land is in very fine condition, it should be dragged after harrowing.

TRANSPLANTING.

This should be done preferably late in the afternoon or on cloudy days. Plants taken from hotbeds and houses should be shaded from the sun two or three days, or until they have become established. The plants should be thoroughly watered several hours before taking up and as much dirt as possible should be taken with each plant. The holes should be large enough to receive the plants without doubling or twisting the roots. If necessary, pinch off the ends of the longest roots. The ground should be firmed about the roots, and the plants should be watered thoroughly after transplanting. After the water has soaked away in field transplanting, throw a little dry dirt over the wet ground around the plants to prevent baking. Hot house plants should be hardened off by exposing gradually to outdoor air before transplanting.

WATERING.

Irrigate before the ground becomes too dry. One way to test moisture conditions of the soil is to clean away the dry top soil, take up some of the lower wet soil and squeeze in the hand. If the soil balls up it is all right; if it is crumbly and tends to fall apart it is beginning to get dry and should be irrigated. Shallow rooted plants like onions, will require water oftener than deeper rooted plants. As a general rule, irrigate thoroughly and not so often, rather than often and not thoroughly. Run the water in furrows between the rows of vegetables; do not flood over the entire surface. Cultivate after each irrigation.

In crops like onions, tomatoes and peppers, which should mature before frost, the water should not be applied the latter part of the summer. This gives the plants time to mature or ripen. Cucumbers may be kept growing right up until frost. For carrots and beets, the ground should not be allowed to become dry as pulling and digging is too hard and unsatisfactory in dry ground. Spinach and chard will be all the more tender if kept well watered until harvested.

CULTIVATION.

The land should be cultivated frequently during the season especially just after irrigation or a rain. This prevents the soil from baking, conserves the moisture in the soil, assists air to reach the roots, keeps out the weeds, and in general keeps the soil in better condition for plant growth.

Directions for canning vegetables may be obtained by club members by addressing Miss Augusta D. Evans, State Leader Club Work, Bozeman, Montana.