ANNUAL NARRATIVE REPORT

OF

MISS MARGARET BILLINGSLEY

COUNTY HOME DEMONSTRATION AGENT

GREENLEE COUNTY

ARIZONA

From December 1, 1944, to November 30, 1945

TABLE OF CONTENTS

I. II. III.	TABI	ER AND TITLE PAGE LE OF CONTENTS MARY	Pag 1
5	A. A. B.	Narrative (Continued)	2
IV.	PRO	JECT ACTIVITIES AND RESULTS	4
	B. C. D. EFGH. J. K. L. M. N.	Extension Organization and Planning. 1. Home Economics Extension Organization. 2. 4 H Clubs. 3. Publicity. 3. Publicity (Continued). 4. Extension Schools. House and Furnishings. House and Furnishings (Continued). Nutrition. 1. 4 H Food Clubs. Food Production. Food Preservation and Storage. Food Selection and Preparation. Health and Safety. Family Economics and Home Management. Clothing and Textiles. 1. 4 H Clothing. 2. Work Simplification and Storage (Continued) Family Relationship. Recreation and Community Life. 1. Recreation. 2. Related Agencies. Home Beautification. Fairs and Achievements. War Activities.	.4 .5 .6 .7 .9 .10 .11 .13 .14 .15 .16 .17 .18 .19 .20 .21 .22 .23 .24 .25
٧.		LOOK	27

VI. PICTURES AND CLIPPINGS

III. SUMMARY

A. Narrative

As Greenlee County has not had a county agent during the past year, the duties of the Home Demonstration Agent have been varied. The office secretary and general office work has been under the supervison of the Home Demonstration Agent. With an excellent secretary, it has been possible to serve the county from an agricultural standpoint through the use of bulletins and by referring questions to the Extension Service Specialists. Many of the specialists have visited the county during the year.

As the Home Demonstration Agent works in two counties - Graham and Greenlee - only about one-sixth of her time is spent in Greenlee. Necessarily the program in Greenlee County has to be limited.

The Program has been carried to three communities in the southern, agricultural section of the county by having demonstrations and group meetings with the homemakers. The two mining communities have been contacted through the Women's Clubs and the county paper, the "Copper Era", and through the mails. In the cattle country of the northern section, the program has been carried by the Eagle Creek Homemaking Club. The agemt makes three of four visits a year to this community in the mountains.

4 H Clubs have been conducted only in the southern part of the county. Here six clubs were organized, five completing their projects. For the first time, a group of high school girls were organized with a very promising leader. However, the leader became seriously ill, so the girls failed to complete their work. Completions in the four clubs connected with the Duncan Grade School were one hundred percent.

The campaign to provide fluorine free drinking water, in order to prevent mottled teeth, has attracted more attention than any one thing which has been done during the year. Nearly every native of Duncan, Franklin, and surrounding areas has discolored teeth. This can be prevented by freeing the water of fluorine. The Duncan city water contains nine parts per million which causes severe mottling.

IIIL SUMMARY

A. Narrative (Continued)

A number of individuals are now using filters in their homes, but the problem is to provide filtered water for every one. A committee composed of members of the Rotary Club are working with Dr. Howard V. Smith of the University on the problem.

Thirty five people who live outside the city limits have brought water from private wells to be tested. Only one of these samples has been free of fluorine.

The project on clothing storage has been received with great interest and with tangible results. Many of the women have solved some of their storage problems by making portable sewing kits and shoe racks; by arranging sewing centers, by grouping equipment, and by putting in extra shelves.

Refinishing wood furniture and reupholstering has also received a very gratifying response.

Cooperative work with all local agencies has been stressed. Talks have been given to the Rotary Club, women's clubs, schools, and church groups. The schools have been generous with their buildings, which have been used for club work and demonstrations. Every bit of publicity which has been presented to the "Copper Era", the county paper, has been published. All groups worked together in Bond Drives and fat salvage.

At all times the Extension Service Program has been planned to meet the needs of the rural communities of the county.

Specialists from the University have spent thirteen days in the county.

III. SUMMARY

B. Statistics

Months in Service	12
Days in Greenlee County	6 604
Days in Field	42
Days in Office	$18\frac{1}{4}$
Home Visits	134
Different Homes Visited	89
Office Calls	161
Telephone Calls	65
Letters Written	400
Circular Letters	6
Copies of Circular Letters	1087
News Articles	51
Radio Talks	
Bulletins Distributed	1849
Demonstrations Given	38
Demonstration Attendance	474
Other Extension Meetings	27
Total Attendance	625
4 H Clubs	6
4 H Membership	74
Auto Miles Traveled	3594

IV. PROJECT ACTIVITIES AND RESULTS

- A. Extension Organization and Planning
 - 1. Home Economics Extension Organization

The Thrifty Homemakers' Club of Franklin are very proud of the certificate of achievement which was presented to them by Miss Jean Stewart, State Leader. The club earned this recognition by meeting all the requirements for a model club as outlined by the State. Interest in this group is so keep that they held meetings every month in the year while most groups discontinued for at least two of the hot summer months.

Work has also been carried on with Homemakers' groups in Luntville and Duncan. While demonstrations have been given regularly in both communities, they should be called interest groups rather than organized clubs.

Eagle Creek Homemakers have continued with their meetings throughout the year. These women who live on cattle ranches in the mountains have carried on with intermittent help from the Home Demonstration Agent. Two visits were made to this group at which time assistance was given in planning programs and in giving demonstrations. An abandoned building, located near the school house, was repaired, painted, and furnished as a club house. Members come from two to ten miles to the club house for all day meetings once a month.

Women in the mining towns of Clifton and Morenci have been contacted by annual demonstrations given to the Women's Club and by mail through bulletins, and through the county paper, the "Copper Era."

Contacts regarding the Extension Program have been made with the schools, with all the church groups, with Rotary Clubs, and with community councils.

IV. PROJECT ACTIVITIES AND RESULTS

A. Extension Organization and Planning

2. 4 H Clubs

4 H Clubswork has been carried on in two communities. The five clubs organized in connection with the school program in Duncan offered an opportunity to all rural children within twenty-five miles, as these children are brought in to the consolidated school system by busses. The small community of Franklin had a separate club organization.

In the Duncan Grade School there were two foods clubs and two clothing clubs. These girls had excellent leaders so every member enthusiastically completed her work. Demonstrations and programs were given before the school and to the Women's Club.

High school girls were organized into a foods club, which was encouraging for a few months, but when the leader became seriously ill, it was not possible to secure another leader so the girls did not complete their projects.

Several of the girls worked individually on their projects during the summer, coming to the office for assistance from the Home Demonstration Agent when she was in their county.

In spite of the fact that the Franklin club did not have a regular meeting leader, they carried on under the leadership of their president who was older than most of the girls. These girls carried foods, clothing, and poultry projects.

Mrs. Kenneth Boevers, an active 4 H leader in Duncan for five years, received recognition for her outstanding accomplishments by being chosen by the state as one of the few to receive the State Leader's Pink

IV. PROJECT ACTIVITIES AND RESULTS

- A. Extension Organization and Planning
 - 3. Publicity (Continued)

"Spare the Sugar - but Save the Fruit" "Vegetables, Vitamins, and Væriety" "Refrigerator Freezing" "Scorched Pan" "Summertime is Melontime" "Go Light on Liquid" "Fat-Saving Salad Dressings" "DDT" "Whipping Temperature" "New Knitwear for Old" "Cranberries" "Nut Yields" "Measuring in Laundering" "Sugar Rations for Sweet Spreads" "Count Your Jars and Fill Them Up" "Moth and Flame" "Fat Shortage" "Home Frozen Velvet# "Jar Caps and Rubbers"
"Freezing Foods" "Sweets in Skins" "Sweet Potatoe Pie" "Spoilage" "Wraps for Frozen Foods" "Spice Layer Cake" "Pecan Rolls"

News items regarding demonstrations, 4 H Clubs, Homemakers' meetings, etc. have had a prominant place in the paper.

Notices regarding Homemakers' meetings, demonstrations, etc. have been mailed every month.

Circular letters which contained educational materials were mailed to two hundred people.

Since the bulletins pertaining to subjects vital to homemakers have been displayed on a rack near the door of the County Agent's Office, there has been a greater demand for them. Bulletins have also been distributed through group meetings and upon request by mail.

Personal contacts with individuals and with community organizations have furthered the Extension Program.

IV. PROJECT ACTIVITIES AND RESULTS

A. Extension Organization and Planning

3. Publicity

The "Copper Era", a weekly which is the only paper published in the county, has printed regulærly the agent's column under the heading HOUSEKEEPING HINTS.

Information on the following subjects appeared in this column:

"Stuffing the Bird" "Wax on the Toes" "Chill Off" *Pecan Nut Meats* (Pressure Cooker) "Hot Spiced Juice for the Holidays" "Small Potatoes" "Christmas Candy" "Pictures in the Home" "Care of Wood Firmiture" "Take Care of that Suit" "Little Oranges" "Can for Planning as you Plant" "Clear Panes" "Cure for Curdling" "Work Simplification" "Labers" "Cotton, Linen, and Rayon Clothing" "Pack Away Your Winter Clothing" "Eggs" "Broken Bones and Acid" "The Eating of the Green" "Fat Thrift" "Meatless Meat Loaf" "Tomatoe Sauce" "Mayonnaise Cake" "Applesauce Cake" "Meat and Vegetable Pastries" "Spanish Sauce" "Full o' Bologney" "Milk in the Dark" "Rings Under the Rugs" "Household Insects" "Leather Goods" "Wool Clothing" "Edible Wild Greens" "Home Canned Pineapple" Birth Registration = 1945" "Housecleaning Made Easier"

IV. PROJECT ACTIVITIES AND RESULTS

A. Extension Organization and Planning

4. Extension Schools

In December a three day school on Work Simplification was held at Mesa for Home Demonstration Agents. Under the leadership of Miss Lorene Dryden, Extension Clothing Specialist, the principles of work simplification as applied to home tasks were studied. In such tasks as mending, dish-washing, and ironing a shirt, time and motion studies were made. Then the principles were applied resulting in improved methods of doing the job. Each Agent went home prepared to apply these principles to her own work and to teach the homemaker to analyze and improve her methods of work.

Under the instructions of Miss Reva Lincoln, Extension Nutrition Specialist, a three day school on Deep Freezing was held in August. The Home Demonstration Agents attending studied methods of preserving foods by freezing. Freezing units, packaging materials, principles of freezing methods of preparing foods for freezing, and preparation of frozen foods for serving were demonstrated. Work periods were held at which time each person present prepared certain foods and later gave a demonstration to the group on the preparation of a selected food. Plans were made for presenting the information to the homemakers in the respective counties.

In August a Family Life Workshop was conducted for the Home Demonstration Agents of the state by Mrs. Lydia Anne Lynde, Extension Specialist in Parent Education, Washington, D. C. Mrs. Lynde stressed the importance of each individual solving his own problem. She presented a workable method for problem solving called, "You Can Work It Out Yourself." Principles in developing good family life were studied and applications made to various phases of the Extension Program. It was Mrs. Lynde's desire that these principles be applied and presented through the projects as planned for each county. By using her methods, any family could be taught to solve their own problems and apply the principles of good family living.

At this conference, time was given to individual program planning with each specialist and with the State Leader. The 4 H program was also thoroughly discussed and plans were made for the coming year.

IV. PROJECT ACTIVITIES AND RESULTS

B. House and Furnishings

Three demonstrations were given in three different communities - Franklin, Duncan, and Luntville - on "Room Arrangement and Pictures." In each case a living room was studied, pictures removed from the walls and several new positions for the furniture tried. When the most pleasing and convenient arrangement was decided upon, pictures were chosen according to color, size, and shape. Pleasing results were achieved and in every case the homemaker felt that definite improvment had been made.

The series of demonstrations and work meetings on annual care of furniture and refinishing furniture carried on in four communities - Franklin, Duncan, Luntville, and Eagle Creek - brought a great deal of satisfaction.

In most cases the contrast between the old and the redone pieces was so great that the women were amazed that only a little soap and water, stain, oil, and elbow grease could make such a difference. These methods of annual care have spread very rapidly throughout the community. Upon request mimeographed sheets containing steps in the process were prepared. The newspaper also carried the information.

Reupholatery is another subject which brings gratifying results. Though a lot of work is involved, the final product makes the women feel the effort has been worth while. With an attendance of thirty one, demonstrations were given in two communities, Franklin and Luntville, by the Home Demonstration Agent. A chair, couch and piano bench were redone under the agent's directions. Later groups of women met in each other's homes and recovered several chairs and a couch.

Nine women in Luntville spent a day making a slip cover for a couch. With all the women working on the pattern and then on cutting, cording, and assembling, two-thirds of the cover was completed. When the agent called the following day, the nicely fitting, tailored slip-cover had been completed and was in place.

Assistance has been given individuals in planning slip covers and directions in bulletins explained. The United States Department of Agriculture bulletin on slip covers has been used by many people.

IV. PROJECT ACTIVITIES AND RESULTS

B. House and Furnishings (Continued)

Several women have been given advice in choosing furniture, linoleum, etc.

New homes are being built in every community so the Home Demonstration Agent has had an opportunity to help the women plan storage space, work surfaces, and in a few cases floor plans. Building working areas according to the homemaker's height has been most valuable.

Donferences were held with individuals and with small groups in order to find out just what a rural homemaker considers most important in a home. This was done in preparation for work which the Home Demonstration Agent did with Miss Faye Jones of the University who is planning a model farm home for Arizona.

IV. PROJECT ACTIVITIES AND RESULTS

C. Nutrition

Proper fed, healthy families is a constant objective. All projects on food production, food preservation, storage, selection and preparation have been presented from a nutritional standpoint. The basic seven has become a meal planning standard in many homes.

During the war when people were made more food conscious due to rationing, teaching nutrition was not difficult. However, not that the war is over there is apt to be a decline and slackness in interest along this line. More effort will have to be exerted in order to have families follow good food habits.

IV. PROJECT ACTIVITIES AND RESULTS

C. Nutrition

1. 4 H Food Clubs

Greenlee County has had two excellent 4 H Food Clubs in Duncan, These girls had an outstanding display at the Graham - Greenlee County Fair.

In Franklin, where the members carry different projects, ten or twelve girls have carried food as a project. Two girls have completed six years. In several homes the girls do all the meal planning and preparation.

Along with food preparation, nutrition instruction is given. The excellent state 4 H food bulletins are of great assistance along this line.

It has been observed that often teen age girls know all the answers to food habits and meal planning, but they do not practice them. Therefore special attention has been given to encourage 4 H members (all members even though their project is other than foods) to practice good nutrition.

IV. PROJECT ACTIVITIES AND RESULTS

D. Food Production

In two communities, Franklin and Luntville, meetings were held on "Planned Production and Preservation." Each person made out a plan as to the exact amount of canned, dried, brined or stored food needed in order to have her family properly fed during the year. Planting dates and new varieties of vegetables were also discussed. Garden plans were secured from Mr. Powers of Mæricopa County and Mr. Boevers formerly of Greenlee County were used for these meetings. The Home Demonstration Agent spent a number of hours assembling the material and in working out the forms which the women used for planning.

The state bulletin, Plan What You Can, was mailed to all rural women.

IV. PROJECT ACTIVITIES AND RESULTS

E. Food Preservation and Storage

"How much pressure should one use when canning chicken?"
"Why is some of my corn brown and some white?" "Is it all right if my pressure cooker leaks steam?" and similar questions are answered daily during the canning season.
All questions are answered and then the person inquiring is given a home canning bulletin with the answer to her question underlined. Many times the agent has made home visits in order to check a pressure cooker or to direct in the use of a pressure cooker or in teaching other canning procedure.

The county pressure cooker is often loaned for a few days at a time to women who do not have one or to those who are canning in quantity and wish to use more than one cooker. Canning bulletins were made available to all women by placing them in rural stores.

Since Greenlee County has no freezer locker plant, canning is practically the only method of food preservation used. A few do some brining and drying. In the mountains root vegetables and fruits are stored.

All fruits canned this year had to be purchased at a very high price as the local crop was frozen. Gardens were not quite as good as usual. Tomatoes and other garden stuffs were ruined by cloud bursts and flash floods.

Approximately fity three thousand quarts of food stuffs were canned.

The following articles concerning food preservation were published in the county paper where they were received enthusiastically:

"Can for Planning as you Plant"
"Home Canned Pineapple"
"Refrigerator Freezing"
"Home Frozen Velvet"
"Count your Jars and Fill Them Up"
"Jar Caps and Rubbers"
"Freezing Foods"
"Spoilage"
"Wraps for Frozen Foods"

A circular letter calling attention to the need for preparing for canning ahead of time so that all equipment, etc. would be in order was mailed to one hundred women.

IV. PROJECT ACTIVITIES AND RESULTS

F. Food Selection and Preparation

The two demonstrations on "Point and Money Saving Meals" stressed selection and preparation of foods available locally. Special attention was given to planning balanced meals which would be low in points and money value. The preparation of whole wheat flour, variety meats, and dishes using sugar substitutes were demonstrated. Meals planned according to the Basic Seven were served.

A leaders' meeting on Poultry cooking was given by Miss Reva Lincoln, Extension Specialist in Nutrition. The Franklin leader gave the demonstration to her group of fourteen women. Following the demonstration a holiday dinner planned around poultry was served. More of these demonstrations will be given later.

The Home Demonstration Agent co-operated with Mrs. JanetterHendricks of the Wheat Flour Institute in giving bread making demonstrations. The Women's Club was contacted by the agent and agreed to sponsor the demonstrations. They arranged the place of meeting and took care of all publicity. The Home Demonstration Aget assisted Mrs. Hendricks in preparing illustrative materials and in giving the demonstration which was held at the High School Building. Both hard and soft wheat flours were used, showing the different technique necessary in using these flours.

It was found that the leading store in the community had no enriched flour in stock so this was brought to the attention of the manager and the Women's Club was encouraged to demand enriched flour and to prepare to get behind any legislation which might come up regarding this matter.

The following articles on food selection and preparation were published in the county paper:

"Stuffing the Bird"

[&]quot;Hot Spiced Juices for the Holidays."

[&]quot;Christmas Candy with Sugar Substitutes"

[&]quot;Cooking Potatoes"

[&]quot;Cranberries for Holidays"

[&]quot;Cakes without Sugar"

IV. PROJECT ACTIVITIES AND RESULTS

G. Health and Safety

Mottled teeth due to the fluorine content of the water is very prevalent in the county. Though it has been known for some years that the fluorine could be removed by filters, very few people had made use of the knowledge. When letters and bulletins were sent out calling attention to the effects of fluorine and stating that the Duncan city water contained nine parts per million of fluorine which is far more than is necessary to cause severly mottled teeth (any amount over 0.9 p.p.m. will cause mottling), public interest was aroused. Water from thirty-five private wells was brought for testing. Several families have purchased filters for their homes. A committee in Duncan is working on the best method of filtering the entire city system. Dr. H. V. Smith of the University made a visit to the county, talked to thirty people in an open meeting and is working with the committee.

IV. PROJECT ACTIVITIES AND RESULTS

H. Family Economics and Home Management

Upon request nine Government Farm and Home Account Books have been given to homemakers. These women have kept good records throughout the year.

IV. PROJECT ACTIVITIES AND RESULTS

I. Clothing and Textiles

1. 4 H Clothing

Two clothing clubs in Duncan and the girls in the Franklin club who took clothing as a project have done very good work. The first year members were especially enthused over the stuffed toys which they made to give their younger brothers and sisters for Christmas. The clothing project members had a good display at the Graham - Greenlee County fair. Duncan clubs also had an achievement day program at the school and gave a 4 H program for the Women's Club.

IV. PROJECT ACTIVITIES AND RESULTS

- I. Clothing and Textiles
 - 2. Work Simplification and Storage

In order to apply the principals of work simplification as learned at the Mesa conference, Miss Lorene Dryden, Extension Clothing Specialist, conducted two leaders' meetings in the county.

At the first meeting five leaders took part in a short demonstration on simplifying the collection of equipment for mending. This made the women conscious of how a homemakers' job may be analyzed and a new prodedure worked out. In order to shorten the time and to improve the system of collecting the materials for mending, it was decided that better storage for sewing equipment was needed. Therefore, time was given for the construction of portable sewing kits. The leaders prepared these kits and used them in similar meetings in their respective groups.

Four of these demonstrations were given in four communities. Several women made sewing kits.

Following the first meeting in work simplification and storage, a second leaders' meeting was conducted by Miss Lorene Dryden. Dresser drawers were studied as to contents, then plans for arrangements were made and partitions put in the drawers. Shoe racks for getting the shoes off the floor were made. Many other types of equipment such as garment bags, shoe bags, racks of all kinds, etc. for clothing storage were shown. Some of the leaders copied equipment of special interest to use in their meetings.

Following the leaders' meeting the same material was presented to groups in Franklin, Luntwille, and Eagle Creek. The leaders presented the material and helped supervise the construction. More shoe racks were made than anything else, but a number of women partitioned drawers, made cabinets for storing shoes, and made bed side tables. These articles were made by the women themselves from apple boxes and orange crates.

An especially interested group of twelve women met in order to learn how to make dress forms. With the assistance of the Home Demonstration Agent four forms were completed. Then the women who attended this demonstration met in smaller groups making seven dress forms for themselves and neighbors.

IV. PROJECT ACTIVITIES AND RESULTS

- I. Clothing and Textiles
 - 2. Work Simplification and Storage (Continued)

The solving of clothing storage problems are to be continued. Miss Dryden held a ledders' meeting with eight women on closet storage. A clothes closet in a members home was studied with the idea of simplifying the problems connected with it. The particular difficulties were the use of waste space, how to make more space, the storage of shoes, storage of boxes containing quilt scraps, etc. After making plans, the women constructed a chest and shoe rack. Extra shelves were put in; also a shelf for holding skates and a divider on the rod to separate the boys and girls clothes.

One follow up meeting has been presented by a leader to twelve women. More closet storage meetings will be held during the coming year.

Information gained at the sewing machine clinics held in 1944 was put into practice throughout the year. Besides help given to individuals by the Home Demonstration Agent, leaders have reported adjusting, cleaning, and oiling at least five machines.

IV. PROJECT ACTIVITIES AND RESULTS

J. Family Relationship

The principles of solving problems and of presenting the subject matter to rural women as given by Mrs. Lydia Anne Lynde have been incorporated into projects. The aim is to weave family relationships into the program of the year. A great deal has been done in this connection through personal contacts and in groups discussions before and after meetings.

IV. PROJECT ACTIVITIES AND RESULTS

K. Recreation and Community Life

1. Recreation

4 H Clubs and two Homemakers! Clubs had Christmas meetings with dinners, programs, and recreation.

The women in Eagle Creek and Franklin have had picnics and dinners during the year. As the Homemakers' Club is the only organized group on Eagle Creek, they have community dinners and entertainments to which the husbands and children are invited.

In most communities in the county recreation is well cared for by the schools and church groups.

IV. PROJECT ACTIVITIES AND RESULTS

K. Recreation and Community Life

2. Related Agencies

Cooperation has existed between the Extension Service and all local agencies as well as state and government agencies. The schools have been especially cooperative in giving time for 4 H Club meetings during school hours, in providing some 4 H leaders and in giving the use of their building at any time for meetings and demonstrations.

The Duncan Women's Club worked with the agent in planning for the bread demonstrations given by Mrs. Jeanette Hendricks of the Wheat Flour Institute.

Three 4 H clubs, upon request, gave an unusually fine program in 4 H projects for the Women's Club.

Each year the Home Demonstration Agent is requested to visit the Morenci Women's Club. This year a talk was given on "The American Home" and a demonstration on the "Annual Care of Furniture" was given.

The Rotary Club has worked with the Extension Service in a campaign to eliminate fluorine from the city water.

A school lunch program is needed in both Duncan and Franklin. In connection with this, conferences have been held with the school principals and information given. The state supervisors, upon invitations from the Home Demonstration Agent, have visited the schools and in Duncan plans are going forward. A school lunch program will begin as soon as equipment can be purchased. In Franklin no decision has been made.

IV. PROJECT AUTIVITIES AND RESULTS

L. Home Beautification

With the exception of a little work done by a few 4 H members and a few suggestions given to interested individuals, very little has been done along this line. However, a very extensive yard beautification program is being planned for the year 1946. Mr. Harvey Tate, Extension Horticulturist, will supervise the project. It is hoped that Duncan as a community will enter into the plans. In the county two homes have already asked for special assistance so they will be used as demonstration homes.

IV. PROJECT ACTIVITIES AND RESULTS

M. Fairs and Achievements

In connection with an achievement program, the Franklin # H Club organized, planned, and served a delicious dinner to their parents.

- A 4 H achievement day was held at the Duncan Grade School with an attendance of forty-two girls. Pins were given at this time. The school principal expressed his appreciation of the work which 4 H girls had accomplished.
- 4 H girls of Greenlee County were invited to participate in the Graham County 4 H Fair. Three leaders and members from four clubs attended the fair having excellent exhibits. Contacts thus made greatly encouraged both leaders and club members.
- Two 4 H girls attended the state 4 H camp. These girls benefited greatly from this experience.
- 4 H Clubs assisted in War Bond Drives and in collecting fats and paper.

In response to the clothing supply and quality survey two homemakers' groups had discussions on available clothing and textiles. The women wrote a letter to H. J. Kny of the War Production Board and one to Chester Bowles of the Office of Price Administration expressing appreciation for their efforts to improve the clothing situation and calling attention to definite shortages in Greenlee County

IV. PROJECT ACTIVITIES AND RESULTS

N. War Acitivities

The entire program was planned to meet the wartime needs. Clothing storage, work simplification, refinishing furniture, point and money saving meals, etc. helped to make the women conscious of conservation of time, materials, money, and labor.

Special work was done in connection with fact collection. In Duncan where it was found that fat collections had been neglected, a meeting of representative people was called at which time Miss Jean Stewart, State Leader in Home Demonstration Work, explained the set up. Definite plans were made for improved methods of removing the fat.

Publicity regarding fat salvage was given through all organized groups and by slides at the movies.

All rural communities had increased collection following the publicity and visits which the Home Demonstration Agent made to rural stores.

PREVENT MOTTLED TEETH

FLUORINE STORY

Ьy

HOWARD V. SMITH
Department of Agricultural Chemistry
and
MARGARET CAMMACK SMITH
Department of Human Nutrition

Cooperative Extension Work in Agriculture and Home Economics, the University of Arizona College of Agriculture and the U. S. Department of Agriculture Cooperating

WATER HIGH IN FLUORINE

CAUSES MOTTLED TEETH



These Teeth are Mottled . .

verely See Table

Children's permanent teeth are usually forming between the ages of six months and twelve years. FLUORINE damages teeth by preventing their proper development before coming through the gums. If the drinking water used in this period is HIGH in fluorine . . . ALL teeth will be mottled (spotted . . . chalky white) and may become stained later. Such teeth are weak and ugly. There is NO cure . . . but MOTTLED TEETH CAN BE PREVENTED by making sure that CHILDREN'S drinking water is LOW in fluorine . . . testing less than one part per million.

WATER LOW IN FLUORINE CAN BE OBTAINED BY



• • • taking water from a DIFFERENT STRATA in your well



• • • removing the fluorine by FILTRATION



HAULING safe water from another source

Amount of Fluorine P. P. M.	Severity of Mottling
0.0 — 0.8	NONE
0.9 — 1.3	MILD
1.4 — 2.0	MODERATE
2.1 — 3.0	MODERATELY SEVERE
3.1 or over 🕹	SEVERE

FOR ALL AVAILABLE INFORMATION ABOUT WATER IN YOUR DISTRICT SEE YOUR HOME DEMONSTRATION OR COUNTY AGRICULTURAL AGENT

V. OUTLOOK

With the return of men from the service and with the young couples (who have been separated due to war) establishing homes in the rural communities, an increased interest in the Extension Program is evident. The young wives are asking for assistance in planning homes, in child care, and in other homemaking projects.

Much of the work of the Home Demonstration Agent will be planned around the needs of these young families. Work will be done with them through the Homemakers' Clubs, through interest groups, and individually. It is hoped that some of them will take over the responsibility of 4 H Clubs, of organization in their communities, etc.

A county-wide home beautification program is being planned. Mr. Harvey Tate of the University Extension Service is working with the Home Demonstration Agent on plans for this program which will include the planting of trees, hedges, flowers, lawns, etc. Community groups will be asked to sponsor the project.

The work which is being done in freeing the Duncan water of fluorine will be continued. It is hoped that before another year passes a satisfactory method of filtering the city water will be in operation.

Cooperative work with all local groups and agencies will continue. The Duncan school will be assisted in the establishment of a shhool lunch program.

Extension publicity and educational materials will reach people through the mails, in the press, and on the radio; and with the passing of another year, Greenlee County should be experiencing more of the benefits which come through the Extension Program.



A Duncan girl assuring herself of mottle free teeth by drinking only water which passes through the filter that removes fluorine from the water.



A group of homemakers at the close of a monthly meeting.



Members of Franklin Homemakers' Club constructing shoe racks from apple boxes.



Former ice house used as storage for canned food, root crops, and cured meat.



Using her dress form and her portable sewing kit which she constructed in her Homemakers!

HOUSEKEEPING HBy HELPS AND Miss II INTS Margaret Billingsley

Home Demonstration Agent Safford, Arizona

Housecleaning Made Easier
The business of keeping the
house clean requires cleaning equipment and materials and daily, weekly, monthly and seasonal cleaning schedules. Let's think about some of the seasonal cleaning that might be done at this time of the year.

Woodwork has accumulated dust, finger marks and, in many cases, a film from the gas stoves. Here's a good formula for cleaning painted woodwork or enameled or painted walls:

1 cake neutral soap (shaved fine) dissolved in

1 quart of water (boiling)

2 ounces of glue dissolved in

quart of water.

Mix the two liquids and let stand until a jelly is formed. Use in the same way as ordinary soap. Put enough in a pail of lukewarm water to make a good suds. Use a sponge or soft cloth to wash walls. Rinse and dry. Rub with good furniture polish to restore gloss.

There is no way to clean calcimined 'walls without leaving streaks. The only way to freshen

them is to put on a new coat.

Pencil marks may be removed from walls by using art gum.

Slightly soiled paper may be cleaned by taking half a loaf of stale bread and rubbing the paper

Grease spots can be made less conspicuous by applying corn starch or flour immediately after the grease has reached the wall. Rub the powder well into the wall and repeat several times. By placing a clean blotter over the greasy spot, and applying a warm iron to the blotter, the spot can often be removed or partially removed.

Another formula for cleaning woodwork is as follows:

Mix one cup of soft water, one

cup kerosene, and one cup of vinegar. Shake well and use as soap. Rinse thoroughly.

Carpets and Rugs

Carpets and rugs that look clean might have enough dirt and gravel imbedded in the fibers to cut and destroy them. A vacuum cleaner is the best equipment for removing this dirt but in the home that lacks a vacuum cleaner, take the rugs outdoors, place with pile down on the grass, sweep good and pat with a broom. After returning it to the floor the colors may be freshened by wiping with a self-colored cloth wrung out of a solution of ammonia and water a solution of ammonia and water in the proportion of one table-

speenful to a gallon. For soiled rugs the following cleaning solution may be used:

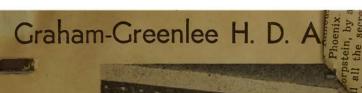
Dissolve a big bar of Ivory soap, one teaspoonful glycerine, two teaspoonfuls borax, and one gal-lon of soft water. (For a room-size rug several gallons will be required). Whip the solution into froth with an egg beater. Scrub over the rug with a brush, clean-ing small portion at a time. Remove the soiled suds with a short-handled hoe or other straight-edged instrument. Wipe with clean warm water, then dry with a cioth. Complete each section before continuing with the rug.

Furniture uphalstered in fabric may be cleaned in the same way.

Graham-Greenlee H. D. A.



Mrs. Ruby Crotts and Mrs. Irene Kennedy, of the Franklin Homemakers Club, Greenlee County, demonstrated that with a bit of carpenter's know-how, you can convert old materials into modern storage facilities.



Mrs. Ruby Crotts, of Franklin Homemakers, converted an old ice house into a storage room for the many quarts of food she put up. Canning goes on the year 'round in Graham and Greenlee Counties—fruits and vegetables in summer and fall; meat throughout the winter.



IT was a circuitous route which led Margaret Billingsley back to serve as home demonstration agent in the county of her birth. A route which led from Duncan, Greenlee County, through Phoenix Union High School; University of Arizona; Scarritt College in Nashville, Tenn.; through 13 years as missionary in Korea; through a job as homemanagement supervisor for the Farm Security Administration in Northern Arizona; and then, back to the Graham-Greenlee area which had been pioneered by her parents.

Her work in Korea, from 1927 to 1940, was under the Methodist Church. Her last four years there, she was superintendent of the first Community Center in Korea. "The Center included a baby clinic, day nursery, milk station, Bible classes, public health work, and kindergarten," explains Miss Billingsley. "Two 3-year schools—one for underprivileged children, one for older girls who had not had previous education. We also had playground work, an English institute, music classes, clubs for young people, home economics clubs and classes for girls and women, and a recreation program."

All this gave Miss Billingsley a pretty firm foundation for her job of helping Graham and Greenlee homemakers improve the health, happiness and well-being of their families through war and peace.

Praised Her Homemakers

Throughout the war these unsung heroines carried on their regular jobs, in addition to assuming a great deal of farm work. Miss Billingsley told the inspiring wartime story of "Mrs. Graham and Mrs. Greenlee" in the Feb. 12, 1944, Arizona Farmer.

And lately, came a letter from Mrs. Irene Kennedy, secretary of the Franklin, Greenlee County, Homemakers' Club, telling how that group lately worked for—and received—a Certificate of Achievement, awarded by the Extension Service.

"Our members have always learned practical homemaking methods from Miss Billingsley," wrote Mrs. Kennedy, "but in order to be worthy of the Achievement Certificate, we had to go ourselves one better.

"Our year's program included cleaning and adjusting sewing machines; refinishing and upholstery of furniture; room arrangement of furniture and pictures; production, canning and other preservation of food; point- and money-saving meals; and storage of articles needed every day.

"Two pieces of furniture were refinished, and a piano bench given a face-lifting. One old-style dresser was remodeled by putting legs on it, cutting down the frame holding the mirror, and changing the mirror's position. At our work meetings, we also learned how to oil and retouch our furniture.

"Two large unholstered chairs were repadded, and covered with new material. Any professional upholsterer might have been proud of those chairs!

"All our members are farm women; so preservation of food claims our attention the year 'round—fruit and

(Please Turn to Page 21)

Graham-Greenlee HDA

(Continued from Page 18)
and are busy making three more.
A hat box, covered with silk from a cast-off dress and equipped with a tray, holds the sox which await darning, or makes a dandy sewing kit.
Two dresser drawers were divided into comparements for orderly storage of small articles. Sliding trays were made and installed in deep vanity dresser drawers. Three shoe racks and a rack for skates were made. One wardrobe was "emptied out" and re-arranged for better convenience. This is a new project, on which we are still working.

"As a special project, some of the members made dress forms. Seven forms are now finished and in use—saving their owners many a self-fitting headachel

"Our meetings are not all work. We manage to crowd in lots of fun and recreation, including book reviews such as the discussion of 'The Robe' recently by Mrs. Stanley Coon.

"All these achievements have been aided by our home demonstration agent, and our officers, including: Mrs. Ella Gale, president; Clara Wilkins, vice president; Mrs. Irene Kennedy, secretary and treasurer; Mrs. Maude O'Dell, health leader; Mrs. Mary Shipman, nutrition leader; Correne O'Dell and Mrs. Kennedy, clothing leaders; Mrs. Annie Arnett, home beautification leader; Mrs. Ruby Crotts, 4-H leader.

COOPERATIVE EXTENSION WORK

AGRICULTURE AND HOME ECONOMICS State of Arizona Duncan

University of Arizona College of Agriculture U.S. Department of Agriculture And Greenles County Cooperating Agricultural Extension Service Home Demonstration Work County Agent Work

August 10, 1945

Dear Friends:

Everyone living in the Duncan area knows about mottled teeth. However, we are not so familiar with the cause of this brown discoloration. The enclosed leaflet tells us that fluorine in the water is the enemy. This is not chlorine, which is added to purify water. Fluorine is a mineral found in water from sections containing fluorspar. It is said that Duncan is under-laid with fluorspar. Therefore, we find fluorine in most of the water in this area. The Duncan city water has been tested at the University of Arizona and found to contain 9 parts fluorine per million which causes severe mottling of teeth.

Read carefully the enclosed sheet. If you have well water which you would like to have tested, bring a quart to the County Agent's Office. There is no charge for this testing.

Sincerely yours,

Margaret Billingsley

Home Demonstration Agent

MB:rk