GREEN THUMBS
William H. Lucking, Jr.

“Big Bill” Lucking has one of the best, and possibly greenest thumbs in the state. Plants like Bill and he plants. He has been working with plants most of his life. In his younger days he worked with vegetables, and was in charge of the Roberts series, which were at one time the best in the state. A few years ago he tired of everyone expecting him to do three men’s work and “retired” as his own patch of land and the surrounding areas. He has now sold his garden, but we surmise that he is in some way connected with growing of plants as long as he lives. TheRoberts family is still in the garden business, and the arid climate has made it possible for them to grow a wide variety of plants. The Green Thumb will develop and be enjoyed by anyone who has a love for gardening.

THE HERBARIUM

In the last two years we have been building up a rather complete collection of the wild and cultivated flowers found in the state. There have been several expeditions each year on which the开展 has collected. Mrs. Kalmbach, as chairman of the committee, has spent many days each week during this time classifying, labelling and mounting these specimens. A few people have occasionally come in to help her, for which we have been very thankful. There should be several others who would enjoy working with Mrs. Kalmbach a few hours once a week, so that we might get these specimens mounted and filed for use. Call us about it.

MEMBERSHIP

Rosamund U. Perry
Membership Chairman

Our membership drive has brought us several hundred new members, whom we welcome, and who, we hope, will enjoy the pleasures and benefits afforded by membership.

Our treasurer, Mr. Shoemaker, reports that a considerable number of 1948 members have not yet paid their dues for 1949. Our strength depends upon a large and interested membership. We hope that those who have not already done so will send in their dues as soon as possible so that they may continue to receive the “Green Thumb” without interruption.

JANUARY

Maud McCormick

What blushing beets and bloom I grow
While outdoors all is ice and snow!
My garden plan is quite complete,
The weeds are gone, the walks are neat.
And every magic plant excels
The marvels that the seedman sells.
In color, size and germination,
Mine beat his claims and illustration.

If only all my plants would caper
As gay in earth as on this paper!

Picture on front cover by Kwong Yeu Ting, Landscape Architect of Manhattan, Kansas.

CONTENTS

Green Thumbs ........................................ 2
The Herbarium ..................................... 2
January .............................................. 2
Timberline Trees ................................. 5
Christmas Tree Farming ......................... 18
Horticulture in Boulder ........................ 21
Oregongrape ...................................... 24
Winter Bloom in the Garden ................... 27
Garden Gadgets .................................... 27
Improving the Habitat .......................... 28
Colorado 4-H Horticultural Champions ...... 31

JANUARY SCHEDULE

Friday, Jan. 7, Horticulture House, 7:45 P. M.
Fred R. Johnson will explain the state forestry recommendations as given in the Hastings Report. Everett Lee, state Forester, will talk of the Christmas tree situation and give recommendations.

Sunday, Jan. 9.
Trip over the Beaver Brook Trail from Windy Saddle on Lookout Mountain to the Silver Cedar Botanical Reserve below Stapleton House. Meet at Horticulture House 9 A.M. Wear warm winter clothes and bring a pocket lunch. Wear good shoes if little snow and bring snowshoes if much snow. This is a very beautiful trail.

Friday, Jan. 14, Horticulture House, 10:30 A. M.
Mrs. Helen Fowler will talk about trimming shrubs.

Friday, Jan. 21, Horticulture House, 7:45 P. M.
Robert E. More will tell about his experiments with all kinds of evergreens in Colorado.

Friday, Jan. 28, Horticulture House, 10:30 A. M.
Mrs. Persis Owen will talk about “Getting the Garden Ready for Spring.”

Published Monthly.
Sent free to all members of the Association.
Supporting Memberships $2.00; Sustaining $0.00; Contributing $10.00; Patron $20.00; Donor $100.00
Copyright, 1949, by Colorado Forestry and Horticulture Association

OFFICERS

President: Mrs. John Evans
Vice Presidents: S. R. DeBoer, Mrs. George H. Garrey, Stanley H. Johnson, Robert E. More, M. Walter Peisman
Secretary: Fred R. Johnson
Treasurer: C. C. Shoemaker

DIRECTORS

Term Expiring in January, 1949
John S. Barromo, Advertising—Home Gardener
Mrs. Helen Fowler, Shadow Valley Gardens
Mrs. B. R. Kalmbach, Former member of Herbarium staff, Univ. of Colorado
Irvin J. McCray, Landscape Architect
Mrs. Churchill Owen, Home Gardener
Mrs. Robert M. Perry, Home Gardener

Term Expiring in January, 1950
J. Lee Dier, Dean of Forestry School, Colorado A & M College
Mrs. John Evans, Home Gardener
Mrs. Herbert Gates, Colorado State Entomologist
Mrs. E. R. Kalmbach, Former member of Herbarium staff, Univ. of Colorado
Robert E. More, Lawyer and Evergreen Specialist
M. Walter Peisman, Landscape Architect
Scott Willmore, W. W. Wilmore Home Gardener

Term Expiring in January, 1951
George A. Carlson, Park Supt.
S. R. DeBoer, Landscape Architect
Mrs. George H. Garrey, Home Gardener
Fred R. Johnson, Assistant Regional Forerster
Milton K. Kerigan, Lawyer
Allen S. Peck, Retired Forerster
Earl Phillips, Simpson Seed & Floral Co.
L. C. Shoemaker, Retired forerster
COLORADO has fifty-two 14,000-foot peaks—more than all the other states put together. From the 11,000-foot level to about 11,500 is found “Timberline,” one of the most fascinating botanical areas that exists. There eternal winds buffet every living thing. Snow comes early and stays late; in protected hollows it never melts. The ever present rock ledges have almost no soil on them, and practically no humus in what little soil there is. The trees that can find sustenance in these places, and can successfully battle the elements, are tough. They have to be.

The trees at timberline are extremely resourceful. To conserve moisture they reduce the size of their needles as much as possible, so as to lessen transpiration. Needles on these evergreens are so short that familiar trees are sometimes difficult of identification. The prevailing wind being from the west, frequently all foliage and bark on that side of a tree are completely decorticated. Sometimes the wind permanently bends the trunk of a tree along its course, as dramatically shown in the illustrations of “The Praying Mantis Tree” on Mount Evans.

Some of the trees never expose their crowns to the blasts, but hug the ground or even nestle in the lee of more vigorously inclined neighbors.

A climb of but a few hours can be the botanical equivalent of a journey of thousands of miles. Rutherford Platt has pointed out (Our Flowering
As you climb, you are traveling north at the rate of 600 miles per hour!

Let us start with the Lodgepoles at 1000 feet. They predominate up to about 9550 feet. Associated with them, in the upper reaches, have been occasional Alpine Firs, with grayish-white trunks and narrow, spire-like crowns. With the Alpine Fir came the Engelmann Spruce, forming dense forests at 10,500 feet. The Engelmann continues to Timberline, frequently being the last tree to survive. On sunny slopes the Bristlecone stands squat and firm. Along the rocky ridges, the Limber Pine wages its battle with the elements all the way to Timberline; often, in maturity, slowly losing all foliage till the stark, bare trunks, whitened by the sun and rains, form their own monuments of former greatness. Many times the trunks of these trees are twisted—though why, no one has convincingly explained. These “Elfinwood” dance and form grotesque monsters, ancient and modern.

The tree shown on pages 6 and 7 is, perhaps, the most photographed tree in Colorado. The second picture taken, probably, 25 years after the first, shows it stripped of many of the branches present in the earlier picture. On its trunk clings a perfect specimen of a praying-mantis, and the tree has sometimes been called the “Praying Mantis Tree.”

May another photographer continue its photographic history twenty-five years from now!
The Twisted Trunks form Monuments of Former Greatness—Photo by O. Roach.

The Last Stand—Prostrate Engelmann Spruce at Medicine Bow—Photo by U. S. Forest Service.
Limber Pine on Rocky Ridge—Photo by O. Roach

Dancing "Elfinwood"—Photo by Edward Milligan
Bristlecone Pine Sheltering Engelmann Spruce.—From "Colorado Evergreens."

Engelmann Spruce—From "Colorado Evergreens"
On Sunny Slopes the Bristlecone Stands Firm.  
Photo by H. L. Standley

Prehistoric Monster on Mt. Yale.—Photo by Harold McBride.

Center Spread—Sand and Pebbles Decorticite the Trees on the Windward Side  
Photo by O. Roach
MY EXPERIMENTAL Christmas tree farm is located six miles from Colorado Springs over a good road. It consists of 200 acres of steep, rough natural forest. The elevation ranges from 6750 to 7700 feet. The general exposure is northeast, cross it with several small gulches in a general easterly direction, which gives several short southerly and northerly exposures. Some 100 acres support natural stands of uneven aged Douglas fir, ponderosa pine and white fir. The pine predominates on southerly exposures and Douglas fir on the northerly exposures. The other 100 acres support short scrub oak and mountain mahogany, interspersed with kinnikinnick, grama grass and gravel openings. The soil is typical of the area with brownish gravel, with a considerable percentage of ses and humus in the gulch bottoms.

Soil, elevation and moisture are not suited for growing saw timber.

Foothill land of this character is believed to be better suited for the production of natural evergreen materials for decorative purposes. More specifically this includes Christmas trees, boughs for ropes, wreaths, grave-blankets, kinnikinnick and cones, plus such incidental products as mining props, posts, corral poles and fence stays. Even the production of ornamental wildings may well be practised.

It is from the natural stands of Douglas fir that the present cut of trees and boughs is being obtained. Allowable cut on a sustained yield basis from these natural stands has been arbitrarily set for the present at not to exceed 300 trees plus boughs and other incidental products. In the naturally full and overstocked stands only first quality Christmas trees are cut. My basis for management being Christmas tree production, all trees not now of first quality are left for a later cutting when they develop into good quality trees. Those being cut for Christmas trees now have to be long-butted, using four to eight feet of the top for trees. The long butts, after being stripped for boughs, are used for props, posts, corral poles and fence stays. Other trees not now having good Christmas trees in the tops, but having good boughs are clean pruned close to the trunk, but not to exceed one half the total height of the tree. This stimulates top growth and the earlier development of a good Christmas tree in the top. Later such trees will be cut close to the ground, and completely utilized. Kinnikinnick is harvested by clipping out the stems with berries. This in brief covers the handling of natural stands for the present.

At home in Manitou Springs, and as a part of the farming operation, I plant a bed or two (each 4 feet by 12 feet) with Douglas fir seed collected from the older seed-bearing trees on the Christmas tree farm. Such beds are protected with rodent-proof protective screens and ordinary lath so as to provide 50 per cent shade. Seeds are sown in drills so as to produce about 150 seedlings per row four feet long. Rows are spaced four inches apart. Seed beds are cared for along with the home garden.

When two years old the seedlings are lifted and planted on the unstocked areas of the tree farm. For the past two years 4000 seedlings have been planted each spring (in April). The slit method of planting is used. Trees are spaced not closer than two feet apart. The brush cover promises to serve as a good nurse crop. This brush is certain to be a detriment later. Trees are not planted generally in the grama grass sod which occurs in the numerous small openings in the short brush type. Under the above conditions the average number of trees planted per acre varies from 2000 to 3000. Survivals to date average about 75 per cent.

Natural reproduction is fairly abundant on the upper slopes of the Christmas tree farm within and adjacent to the older seed-bearing trees. The natural stands from which trees and boughs are now being harvested have become stagnated as saplings and poles (3 to 6 inches in diameter on the stump). The estimated maximum...
General view looking up slope over tops of some 20 acres of Douglas fir stands, 75% of which are six inches and below on the stump.

number of saplings and poles per acre is 2500. In addition there are clusters of natural seedlings 2 to 12 inches in height. The estimated maximum number of these is 2000 per acre.

Nearly all of the work incident to planting is done by myself. The harvesting of the crop each year is given supervision. All products are sold on the stump and cut by the operator. No previous marking is done. The operator is urged to cut only the best quality trees available. The stumps are cut close to the ground. Trees which seem most unlikely to develop into Christmas trees within a reasonable time are cut and limbed out for boughs. This sort of cutting opens up the stand gradually over a long period and aids in hastening the development of good crowns for Christmas trees on those left. It should be explained here that these natural stands, trees 3 to 6 inches in diameter on the stump and 0 to 20 feet high, must be cut and one-butted to obtain good, usable trees 4 to 8 feet high. It must also be recognized that in starting from scratch with a forest in a natural, wild condition, I am faced with a big conversion job, that is, the natural forest must be converted to a sort of man-made or managed forest.

It is much too early to draw any conclusions from this experiment. It is not amiss, however, to mention some of the things it is hoped to accomplish.

Of first importance is adequate fire protection. To attain this beyond my own effort is to look to the U. S. Forest Service and County fire organizations. Of next importance is to get the entire 200-acre tract fully and properly stocked with Douglas fir, using natural reseeding, artificial direct reseeding and planting practices. Ten years has been arbitrarily set for the accomplishing of this. Next is carrying on the annual harvesting of decorative material with a view of increasing the cut as more information is obtained and the trees become merchantable. Finally it is hoped to determine whether or not Christmas tree farming is practicable as a private undertaking on a long-range and sustained yield basis.

THE community of Boulder is waking up to their special horticultural advantages and are doing something about it. At present this development is in three parts.

The Boulder Garden club, under the able leadership of Mrs. J. F. Sullivan, is arranging to locate, list and label the many unusual trees found in the city and surrounding country. This is a most worthwhile project, for Boulder has more unusual and "impossible" trees than any community in the state. They will really make an arboretum of the city.

Another project being promoted by

Committee discussing plans on the site of the new planting. Photo by Munch of Boulder Camera.
An interested individual is the taking of the "White Rocks" area into a botanical reserve. In this area are found many plants which are growing in only a few other places in the world. The archaeological value of this area is also great. It should be reserved for future generations.

The project being most actively carried out at present is the development of the old railroad right-of-way behind the new athletic field. Maud Reed, biology teacher and human dynamo, is promoting this work, backed by the school officials, garden club, Audubon society, war memorial committee and many private citizens. This steep waste area will be made into an arboretum of native plants. The east end bordering on Broadway will have a planting of evergreens to match those across the street, and the east

American Beech in Green Mountain Cemetery.

High School Biology class working at cleaning up "Holubar Ravine." Photo by Muench, of Boulder Camera.

General view of site of Arboretum from Broadway, looking east. Planting of evergreens will be made here to balance that across the street.—Photo by Ed Schneider.
end will feature "Cactus Hill." The value of this project will be two-fold: landscaping and beautifying the background of the athletic field, and providing a place to display a great variety of the native trees, shrubs and wild flowers.

Not every community can go as far in developing their horticultural possibilities as has Boulder, but there is no place in the state which cannot improve the appearance of their community by planting many more things than they now attempt to grow.

OREGONGRAPE

Mr. S. R. DeBoer calls our attention to the fact that the reference to Oregongrape in the article in the December Green Thumb may be misunderstood. This article refers to the Eastern Mahonia, and should not be confused with our native plant. He gives below the comparative description of Colorado Oregongrape and Mahonia repens, or Creeping Mahonia. It grows not over two feet high, and is of the two species.

The correct name for our native usually under eight inches. It holds its leaves all winter, those in the sun turning a beautiful red and those in shade remaining green. It suckers by underground runners, and partly for this reason is very hard to transplant. It has normally less leaflets than the Eastern type.

The Eastern Oregongrape is properly called Mahonia aquifolium, or Oregon grape. It may also be found on the West Coast, but not in the Rocky Mountain area. It grows up to four feet tall, prefers shade and often loses its leaves in late winter. It does not have sucker roots and transplants more easily.

**YOUR TREES**----We Suggest at this Season

**DORMANT SPRAYING**—for the control of scale insects; considered among the most destructive pests affecting the trees in this area.

**PRUNING**—the removal of dead, diseased and interfering branches. The proper treatment of wounds is highly important.

**FERTILIZATION**—very essential in restoring trees to their natural health and vigor to resist attacks of disease and insects.

**TREE REMOVAL**—when the ground is hard or frozen this work is less destructive to lawns.

Call Our Representative for Consultation Without Cost or Obligation

Swingle Tree Surgery Company

Member of Associated Arborists of America

Office Phone KE 4776
Residence Phone DE 6349

**Do you have our 1949 Illustrated Catalog? IT IS FREE**

The Colorado Seed Co.

1515 Champa St.

Denver, Colo.

KE 1351

Ask us now to check your trees for spraying or trimming that they may need at a later date. Now is the time to have dead or crowded trees removed.

C. J. WILHELM

SPruce 6163

1080 S. Colorado Blvd.

Denver 10, Colorado

The Green Thumb

24

Marshall Nurseries

Better Built Trees—Landscapes with Personality

CALL US EARLY FOR YOUR FERTILIZER

Barnyard Milorganite

South Denver Evergreen Nursery

SP 2350

1334 South Broadway

SP 7768

ALAMEDA NURSERY, Inc.

Plan for Your Spring Planting NOW

2645 W. Alameda Ave. PE 3791

THE WESTERN SEED CO.

Gold Seal Seeds

Flower Seeds

Field Seeds

Garden Fertilizers

Insecticides

Planet Jr. Tools

Lawn Grass

Onion Sets

Binder Twine

Sacks

Sock Needles

Socking Twine

1425 15th Street TAbor 4255

Established in 1886 as a Dahlia Farm

Wilmores Have Handled Fine Evergreens for Over 20 Years

W. W. Wilmores Nurseries

P. O. Box 382

Denver 1, Colo.

Phone Glendale 4737

THE GREEN THUMB

25
The Green Thumb

Denver needs her elm trees. Let's help save them by trimming off dead branches and taking out diseased trees.

Our service is as near as your phone

AMIDON'S CASH NURSERY
2155 W. 48th
GR 4366

ROY L. CLOWES
Tree and Landscape Service
Boom and Winch Truck Service
Lawn Spraying
Better Fences Cement Work
Custom Plowing Flagstone Walks
SP 9380
1828 W. 4th Ave.

"Makers of Beautiful Gardens"
Roy E. Woodman and Bros.
Landscape Gardeners and Nurserymen
Denver, Colo.
SPruce 5509

Trees and Shrubs
Trimmed and Removed
SCHULHOFF TREE SERVICE
GRand 2245

LANDSCAPE SERVICE COMPANY
extends
BEST WISHES
for a
HAPPY NEW YEAR
1055 Josephine
FR 8555
Denver, Colorado

For Bigger, Better, More Profitable Crops

ROTARY TILLAGE STARTS IN FALL

BUY YOUR M-E ROTARY TILLER NOW

Model G-16-W71/4
Cub 16" swath

It matches surface vegetation throughout tilled depth now and disintegration will start this fall — continue through the winter — assure a soft, humus soil next spring. As a result, your ground can be worked much easier, weeks earlier.

FREE Demonstration on your soil

THAETE IMPLEMENT CO., Distr.
8560 West Colfax Ave.
Denver 15, Colo.

For the long months between the disappearance of the last warm-hued chrysanthemum and the awakening of the first crocus, most Rocky Mountain gardeners depend on the bright-berried shrubs outside and window-garden flowers within for colorful winter accents. Yet we lose much if we ignore the few hardy plants that will bloom here in spite of all the blasts of winter, especially if they have a modicum of moisture and a somewhat sheltered location.

In my own wind-swept garden and in every month of winter, I have found bloom of the little viola tricolor, better known as heartsease, Johnny-jump-up, Shakespeare's pansy, or by many another common name. Waif though it is and sometimes too persistent in small, neat gardens, I shall always keep it for its bright hardihood. In mild, reasonably moist winters, it blooms in the open, perhaps on the sunny side of a clump of daisies. Even in our harshest and driest weather, it produces scattered bloom in protected borders on the south and east. The hardy viola cornuta hybrids, Blue Perfection and Yellow, show bloom after every snow, often somewhat battered, it is true, but with fresh buds ready to open after a few days of sunshine.

Buds are swelling now (early December) on the Christmas roses set out last year. Established clumps are doubtless in full bloom in gardens in various parts of Denver. The best of these hellebores (they are not roses) is E. niger albifolius, not too easily found in the catalogs, but available from a few Eastern firms in spring and fall. Winter's harshness cannot prevent these pearly buds from opening, but the exquisite bloom endures for weeks in its perfection if it is protected by a large glass jar. As a cut-flower it lasts two weeks in the house.

The Lenten rose, H. orientalis, blooms later, yet before the spring season opens in our gardens. It is an eddy with its queer dark maroon flowers and well worth having in our season of dearth. All the hellebores, so far as I know, prefer summer shade and winter sun, with plenty of moisture and a soil reasonably well supplied with humus. A small book about them has just been published by the Luedy growers of Bedford, Ohio, which should answer some of our many questions about their care. Arthur and Mildred Luedy have grown the plant for twenty-five years and presumably know most of its likes and dislikes by now.

GARDEN GADGETS

Two very interesting garden gadgets were demonstrated by members of the Men's Garden Club when speakers from their membership took over the Friday evening meeting at Horticulture House November 26th. Martin R. Keul demonstrated his home-made "soil stirrer" which consisted of an old tire iron bent at a right angle and attached to a hoe handle. This made a narrow one-pronged hoe to stir the soil around crowded vegetables and plants.

Robert E. Ewalt displayed the "water wand," an aluminum extension for the hose so that hard-to-reach places could be soaked. This is a product obtained at your seed store.

Let us know of your favorite "Garden Gadget."

SUBSTANTIAL NURSERY STOCK

for

ROCKY MOUNTAIN and
PLAINS REGION

KROH BROTHERS NURSERIES
Loveland, Colo.
IMPROVING THE HABITAT

By Allen S. Peck

The program of shelterbelt planting embarked upon by the Colorado Game and Fish Department is of interest to farmers and foresters as well as to pheasants, cottontails and hunters. The Commission, and Director Jeland N. Feast, and his staff, are to be complimented on their far-seeing plans for providing more cover for the protection of small game and birds so that they may flourish and increase. The value of plantations of trees and shrubs in this regard has been clearly shown by the shelterbelt plantings of recent years along the eastern reaches of the Great Plains. Foresters, soil conservationists and others have long advocated such plantings on the plains arms and ranches of Colorado for he purposes primarily of protecting crops and live stock and making farm homes more livable. Quite a lot of this has been done largely under the leadership of the State Forester and State Extension Service with help from the Federal Government through the Forest Service, under the Stark-McNary Law, and through the oil Conservation Service. Now comes the State Game and Fish Department, growing its weight and leadership into the movement for more and better shelterbelts from a different angle and one which should have great popular appeal to bird lovers, hunters and landowners alike.

The Game and Fish Department—allike many others—has money to spend; money contributed by the Federal Government and by those of Colorado's citizens and visitors who like to hunt and fish. To what better use can some of this money be put than to plant acres and acres of trees and shrubs—many of them food producing—for the mutual benefit of wild life and humans who are fond of it for one reason or another? These plantings are to be made on suitable lands where the owners are agreeable and on state owned lands. No doubt some country school yards can be included. Certainly youngsters won't object to having a few birds and rabbits around. And this project may stimulate the developing of a number of small state parks, some possibly with fish ponds, on our eastern plains—a thing that many of us have been urging for years. At any rate here is a fine opportunity for some very desirable coordination between several state agencies on a program of land use that should be of great public benefit.

In this connection it seems to me personally that it was very unfortunate that the State Board of Forestry turned over to the Extension Service last spring the distribution and sale of tree planting stock.

The job, in my opinion, is logically part and parcel of the functions of the State Forester's office, which is distinctly an action agency and would be able to work closely with the Game and Fish Department in supplying the planting stock needed for the latter's shelterbelt project. It may be worth while mentioning at this point that the program of tree planting on the National Forests of Colorado has been shrinking year by year and that the Forest Service nursery at Monument is now being operated at only about 20% of capacity. It would seem that some way could be found to make use of the splendid plant and the techniques that have been developed there the past thirty odd years, to provide a lot of the stock that will be needed for a good strong coordinated state program of game cover, windbreak and park planting.

Protect Your Investment

in Lawns and Landscaping

with A. C. Oughton
Lawn Sprinkling Systems

Scientifically Engineered and Professionally Installed

Distributors for the Mountain States

EVERTT O. NORD & SONS
Landscape Design and Construction

1317 Dahlia St. Denver 7, Colo.

Dealers Wanted
JUNIOR horticulturists in Colorado take their project work seriously and they are well rewarded. Colorado is proud of these junior gardeners and of their outstanding achievements. In national competition they are advertising Colorado as a horticultural state.

In 1946, Wayne Delventhal of Brighton, Colorado, was named Grand Champion Youth in the National Green Thumb Contest; also, National 4-H Garden Champion and Sectional Champion in the National Junior Vegetable Growers Association.

In 1947, Dorothy Fresieres of Manitou Springs, Colorado, received the National 4-H Championship in home beautification. Harold Rupert of Pueblo, Colorado, was named National 4-H Garden Champion, and Keith Delventhal of Brighton was named Regional National Junior Vegetable Growers Association Champion.

In 1948, Keith was named National 4-H Garden Champion, and Vanita Hall of Peyton, Colorado, was named Sectional National Junior Vegetable Growers Association Champion.

Wayne, Dorothy, Keith and Harold have all received trips to the National 4-H Congress held at Chicago. Keith also received a trip to the National Convention of the National Junior Vegetable Growers Association held in Mississippi in 1947. Besides the many county and state prizes received by the champions, they have received $1,600 in scholarships as awards in national competition.

In 1948, nearly 2000 boys and girls from town and country were enrolled as 4-H members in gardening and home beautification projects. In the gardening projects, new and younger members are taught the fundamentals of gardening and they have small gardens to supply a part of the vegetables for the family during the growing season. As the members grow older and become more experienced, their gardens become larger. The aim is to eventually make them leaders in the field of commercial vegetable production, marketing or processing.

Home beautification projects start with annual flowers, then come perennial flowers, lawn care, mapping and finally the fundamentals of landscape. The appearance and service features of many Colorado yards have been greatly improved by boys and girls receiving instruction in their 4-H club from several hundred volunteer 4-H leaders.

While the achievements of the champions are glamorized, it is the competition of the several hundred 4-H members enrolled in the same projects back in the local community which makes for National championships. Each year there are many 4-H members whose work is nearly as good as those who win National honors, or perhaps good enough for National honors, but they must win the state honors first.

*The 4-H program is open to any boy or girl between the ages of 10 and 21 who is not doing college or university work. It is sponsored and directed on the state level by the Extension Service, Colorado A. & M. College, and on the county level by the county Extension agents.

Back cover—Young Tulip tree at 2233 4th, Boulder.