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The Green Thumb
Vol. 7 JULY, 1950 No. 7

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PLAINT OF A PRICKLY POPPY

By the side of a dusty road I grow, And when man grows up to God’s perfection
My petals are white as the driven snow, He’ll regard me then with pure affection.
And though man has given me a graceless name, ‘Tis not my aim to be prosperous or great,
If he cannot see beauty, am I to blame? To adorn a palace or sit in state;
My blood is yellow and my thorns are sharp, But daily perform my simple duty; For ever expressing God’s roadside beauty.
But my soul? ‘Tis pure as an angel’s harp; —B. E. F.

Picture on front cover of beautiful rear terrace at home of I. F. Downer, at 270 Ogden St., Denver.

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Lessons From The Storm

The morning after our recent unseasonal snowstorm, many gardeners felt rather hopeless about the prospects of growing trees in Colorado. If they will study the causes for the extensive breakage of trees they will learn much to prevent future damage. The storm may even be a blessing in disguise. Even though the last similar storm was 14 years ago and the next one may not be for another 14 years, it would be well to plan now to prevent a recurrence of this catastrophe.

The first factor in preventing storm damage to trees is to select the right kind of trees. Members of the Colorado Nurserymen's association have had many years experience in growing trees and in observing the effects of our weather on them. Take their advice when they recommend the better slower growing trees. Many of the quick-growing kinds are short-lived and easily broken in a storm. You cannot afford to plant a weed tree such as a boxelder, even though it is given by your good neighbor.

The next mistake made by many home owners is to plant trees too close together, so that they develop abnormally long and misplaced limbs which cannot withstand heavy weights of snow. Before you plant a tree inquire of your nurseryman as to its ultimate size and get his recommendation for spacing.

The third main cause of storm damage is lack of proper care. This may include insufficient watering, lack of fertilizing and neglected pruning. Good trees deserve good care, for they have many difficulties to combat under cultivated conditions that they do not have when growing in the wild. Give special attention to proper watering of newly transplanted trees. Trees which were properly pruned and braced previous to this last storm had very little damage done to them.

Let the lesson of the storm teach us to plant better trees and care for them in a better way. Call your nurseryman for advice.

AMERICA'S FIRST CONSERVATIONIST

Don't pity the poor Indian, he may be smarter than we think. Here is an interesting extract from a recent letter from Dwight Kelly, who lives in Los Angeles, to his brother, George W. Kelly.

"As you know, we have been interested in the Hopi Indians for some time, because they seem the least spoiled of the western tribes. There have never been more than a dozen or so Hopis ever converted to the Christian religion. It occurred to me that their religion must be very satisfying to them to keep them with it so faithfully, so I have gotten as much information regarding their beliefs as I could.

"They feel towards plants and animals as though they were as much a part of the universe as man is. They do not harvest growing plants or kill wild game without first making a prayer offering to their "super-god" for having taken of his overall work. A Hopi will not kill a rabbit unless he has first made prayer offering or "Pahos" (generally several small feathers on a string) to explain to the gods that he needed the rabbit to eat. Nor will they take a living plant or tree. The first time that we were at the Hopi villages I wondered why they hauled dead cedar wood for miles when there were cedar trees growing all over their towns, but I found that as long as there is dead wood available within miles they will not touch a live tree. Their religion recognizes the balance of nature."

MY WANTON SCARLET MAPLE

So feminine, so shapely-tall She does a Strip-Tease every fall; Bare Limbs all winter, then, by Jing, A whole New Outfit every spring. Her summer mode the climax caps, For then she just lives off the Saps.
EDIBLE WILD PLANTS OF THE ROCKY MOUNTAIN REGION

By Helen Marsh Zeiner

HAVING spent my childhood on an isolated ranch where often the only fresh fruits and green stuffs available were native plants, I grew up with an acquaintance with our edible wild plants that has given me a great deal of pleasure all my life. It seems unfortunate that with modern methods of food storage and improved transportation which remove the necessity to use native plants, this most fascinating branch of nature lore is being lost to many. Those who know the fun of “living off the land” are indeed privileged, and are all too few.

Most of us do recognize some of the edible wild fruits, but even here some uninitiated persons scorn these as being inferior and do not even recognize some of the less common ones. Perhaps the common western chokecherry (Prunus melanocarpa) is the most widely used of our native fruits.

Usually found along or near a stream, often tenaciously clinging to the rocky slopes above the stream, the chokecherry is an erect shrub or small tree with alternate, shiny leaves, brown bark marked with lighter spots, and long flower clusters of small fragrant white flowers followed by black fruit whose astringent qualities give the tree its name “chokecherry”. The fruits make a jelly with a distinctive and truly delicious flavor. There are other uses for chokecherries besides jelly, however. Have you ever tasted chokecherry pie? Or spiced chokecherries? If you are fortunate enough to own a cherry-pitter, these delicacies are not difficult to prepare; but I consider a chokecherry pie once a year worth the tedious and messy chore of picking the pits by hand out of cooked chokecherries. If you attempt a chokecherry pie, use a spoonful or two of vinegar, and don’t spare the sugar! We also made chokecherry syrup to use on pancakes; it is heavenly on waffles, too. Some of our neighbors favored chokecherry butter, but this we never cared for.

The bright orange red fruits of the buffalo berry (Shepherdia argentea) are another source of jelly. Delightfully tart and beautifully colored, this jelly has an indescribable flavor all its own. In Colorado, the buffalo berry is common on the western slope. It is a tree-like shrub easily recognized by its opposite silvery leaves and its scarlet berries. We gathered the berries by spreading an old sheet under the bush and vigorously shaking the berries onto it. Since the berries are very small, picking them by hand is a thankless task.

Another jelly fruit of the foothills is the Oregon grape (Mahonia repens), easily recognized by its glossy holly-like leaves, yellow flowers very early in the spring, and grape-like clusters of blue berries later in the summer. The edible qualities of this fruit appear not to be well-known today, but it was a common sweet in many pioneer homes.

No summer trip to the mountains would be truly complete without a handful of wild strawberries or wild red raspberries to munch on along the trail; and if one is so fortunate as to find enough of either to make a shortcake or a bit of jam, then the day is perfect! For pure ambrosia, the shortcake should be made with biscuits baked over the campfire, buttered generously, and covered lavishly with crushed and sweetened berries. The wild strawberries (Fragaria spp.) are at their best in moist places such as...
as meadows and woods, but they can be found almost anywhere in the mountains, and sometimes old railroad beds or other seemingly unlikely places will yield a fine crop. The fisherman may find red raspberries (Rubus strigosus) along the streams where he fishes, but another very typical place for these plants is a rock slice or other bare area. The low, prickly bushes with their white flowers and red berries are unmistakable.

Wild plums (Prunus americana) abound along streams in the plains and low foothills. Early in the spring the thickets formed by these small trees are massed with white bloom, and later in the summer the trees are decorated with red and yellow fruits. When ripe, the plums have a delightful flavor, although the skins are usually tough and sour. They are a popular jelly fruit, making a tangy tart jelly with a beautiful color.

In moist places in the mountains, wild gooseberries and currants (Ribes spp.) are plentiful. While they are rather tart to eat "out of hand," they make excellent jam. Our commonest wild gooseberry is Ribes saxorum, which is a prickly shrub with palmately lobed leaves, producing smooth and often quite large dark purple (almost black) berries. In contrast to the gooseberries, the shrubs of currant are without thorns or prickles. Currants and gooseberries are characterized by the wizened remains of the flowers which crown the berries.

The service berries (Amelanchier spp.), also called Juneberry or shadbush, are shrubs (often large) with alternate, somewhat rounded leaves, and lovely white flowers with five strap-shaped petals appearing early in the spring. The berries are purple, sweet and juicy in the forms found in moist places, somewhat dry and insipid in the species characteristic of dry places. Service berries make an excellent fruit sugared and served fresh. A combination of wild gooseberries and service berries cooked together makes a very tasty sauce. This was a favorite with the hands in the sawmill my father once operated. As long as this sauce appeared on the table, the men would eat no other fruit, and my brother and I were kept busy hunting the ingredients for this treat.

Even the wild roses (Rosa spp.) which we admire for their delicate blooms produce a fruit which can be eaten. The pulp surrounding the mass of seeds in the rose "hip" is sweet although dry and makes a tasty snack along the trail. Our grandmothers made a kind of jam from rose hips which they considered a delicacy.

We have a number of hawthorns (Crataegus spp.) whose fruits can be utilized for jellies; others, while edible, are insipid.

In moist shady spots in the mountains one may find blueberries or bilberries (Vaccinium spp.). These are low, somewhat woody plants with shining leaves, pinkish blossoms, and dark blue berries of excellent flavor.

Most children who live on ranches know that cactus fruits are edible and really quite delicious. The next
My favorite wild greens are lamb’s quarters (Chenopodium album) and redroot (Amaranthus retroflexus). In early spring these appear as weeds in gardens, on broken ground, etc. Chenopodium has pale green leaves, white and measly in appearance on the underside. Amaranthus has roughish, dull green, wavy-margined leaves and red roots. Either one is good alone, but a combination of the two is best. Picked when very young, boiled until just tender, seasoned with butter or a bit of bacon or pork and a touch of vinegar for those who like it, and you have a tasty vegetable just for the picking—and perhaps your garden is weeded at the same time! Mustard greens are commonly used, most people preferring to mix these with mild flavored plants such as lamb’s quarters or redroot. Many members of the mustard family (Cruciferae) are used; black mustard (Brassica nigra) and shepherd’s purse (Capsella bursa-pastoris) are common ones. All mustards when in bloom can be told

by the four-petaled flower forming a cross from which the family takes its name.

The lowly dandelion (Taraxacum spp.) is a favorite of many, and if taken early in the spring while still young and tender the flavor is mild; as the season progresses, the plants develop a bitter taste and tends to be tough. Some people cover the young dandelion plants and blanch them to use as salad greens.

Urtica gracilis, the stinging nettle, is used as a potherb by some. I ate this plant just once as a child; all of us enjoyed it but my mother, who refused to taste it or ever to cook it again because it developed such a poisonous green color on boiling. Purslane, (Portulaca oleracea) that obnoxious garden pest with fat, spatulate leaves and spreading habit may be cooked or the young stems and leaves may be used as a salad. Another common weed said to be edible as a potherb is the common plantain (Plantago major).

The little round leaved mallow known to children as “cheeses” (Malus rotundifolia) can be cooked as greens. The round flat fruits or “cheeses” are good to eat raw.

Along the roadsides we see chicory or blue sailors (Chichorium intybus), recognizable by its sky-blue strap-petaled flowers. The young plants are sometimes cooked and the roots can be used as a vegetable, although they are more commonly used as a substitute for coffee or an adulterant in coffee.

Wild lettuce (Lactuca scariola), when young, can be used as a salad plant or a pot herb. It is said that common chickweed (Stellaria media) makes good greens—perhaps that would be one way to get rid of it! Rumex acetosella, Sheep sorrel or “sour grass” has an arrowhead-like leaf very sour to the taste. Most children enjoy eating these leaves, and they are sometimes used in salads. My grandmother used to tell of making pie from the leaves, saying that it was as good as rhubarb pie. Even Russian thistle can be cooked when very young, and is said to be very palatable.

Many other plants can be cooked as greens, but the above are very common and are familiar to many of us as weeds. Many persons who do not
like native greens feel this way because those they tasted were either too old to begin with or were overcooked after they reached the kitchen. They are certainly as palatable as our garden greens when taken very young and properly cooked.

In mentioning edible plants, we should not forget the mints which are so nice for seasoning and sauces. They occur along streams, and even though the stream may be intermittent, the mint will thrive and provide tasty leaves all summer.

Many edible plants which would not appeal to our conventionalized tastes were a part of the stable diet of the Indians. These plants interest me as a potential food supply which could be used in time of necessity; actually, there are many of them which have kept lost travelers from starvation in times past.

In addition to all the plants previously mentioned, the Indians used such fruits as the hackberry ( Celtis occidentalis). While we may enjoy nibbling on the thin sugary flesh of these berries, we would hardly think of prickly pear was skinned to remove the thorns and then used as food. It has been reported that settlers in some of the dry parts of this country have followed this example. In some sections, we make use of yucca pods ( Yucca baccata) which are said to make a pie similar to apple pie. The Indians not only ate the pods of this species which ranges into southern Colorado, but they also used the pods of Yucca glauca which is very widespread in its distribution. They ate the buds of many yucca species.

Nearly all grass seeds which occurred in any quantity and many wild flower seeds were ground into meal for mush or bread. The seeds of Amaranthus and Chenopodium were very commonly used. Sunflower seeds were very important. These are seeds which any small boy can tell you are very worthwhile eating—a bit of trouble to remove the hull, but the kernel is sweet and delicious. Among the grasses which provided abundant seeds of a fair size were species of Sporobolus ( dropseed); Oryzopsis ( Indian millet), a bunch grass with an attractive spreading inflorescence; Bromus ( wild oats);

Muhlenbergia ( muh-ly), ordinarily dried for winter use. They ate it worthwhile to utilize them as an important part of our diet. Indians, however, ground seeds and all and used the resulting paste alone or with meat. They also utilized our native acorns, leaching them in various ways to remove the extremely bitter flavor most of them have. They used juniper berries, ground and eaten in mush; prickly pear fruits; pods and flowers of pink locust ( Robinia neomexicana), species of currants which we would consider insipid and not worth bothering with; hawthorns; yucca pods; and indeed, any fruit that experience had shown could be consumed without disastrous effects.

The flesh of prickly pear was removed this example. In some sections, we make use of yucca pods ( Yucca baccata) which are said to make a pie similar to apple pie. The Indians not only ate the pods of this species which ranges into southern Colorado, but they also used the pods of Yucca glauca which is very widespread in its distribution. They ate the buds of many yucca species.

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THE NATURE AND USES OF PEAT MOSS

By John W. Dunfield
Northern Peat Moss Co.

THE objective of every good gardener is to have plants grow and thrive well in the allotted garden area with the least possible care and expense. To accomplish this, every one knows that the garden soil must be rich and fertile. In other words, the soil must be “Good Earth” and must be maintained as such.

More and more gardeners are using peat moss in their gardening to achieve the “Good Earth” in their particular garden soils. The essence of a “Good Earth” policy is to have and maintain the organic content in the soil. Sphagnum peat moss is one of the finest sources of organic matter obtainable.

Organic matter in the soil serves two primary purposes:

Firstly, the very necessary humus is derived from the organic matter. The organic matter is the prime source of nutrient for the soil bacteria. Without organic matter there can be little bacteria life in the soil. Without bacteria life, the soil is dead and barren. So organic matter is required in the soil to provide the fitting environment for the microorganisms and bacteria. This function of organic matter can be called a biochemical action in the soil.

Now the second purpose of organic matter in the soil can be called a purely physical one. This physical function is equally as important as the above mentioned biochemical function. The physical service of organic matter is one of conditioning the soil to the best advantage for plant growth.

Peat moss, as the gardeners’ source of organic matter, excellently fulfills these two primary purposes.

Many other vegetable matters serve the purpose of the bio-chemical action in providing a source of humus — such materials as manures, green manures, leaf mold, and compost. But none of these other vegetable materials can equal peat moss in the physical function of conditioning the soil. So we might say that the great advantage of peat moss is in the physical aspects of soil conditioning.

The initial characteristic, of importance to the gardener, is the extremely high moisture absorbent factor of sphagnum peat moss. It will absorb up to 18 times its own weight in water. When peat moss is thoroughly mixed with the soil it absorbs and stores the useful soil moisture in that part of the soil where the plant roots are growing. In doing so, the peat moss retains the water in which is contained the valuable plant foods that are so vital to the health of the plants. This has the effect of providing readily available moisture and plant food continually to the roots.

This feature of peat moss is particularly valuable in light, sandy or gravel soils. In this type of soil after rainfall or watering the soil moisture is rapidly drained away . . . carrying the valuable plant foods with it. The addition of organic matter to sandy soils then tends to bind up the loose soil and provide reservoirs to catch and retain the moisture.

In heavy clay soils, peat moss has the opposite effect. It loosens up the clay . . . making it much more porous and susceptible to the passage of water and air. In clay soils, the particles of clay are so closely packed together that free passage of water and air is greatly retarded if not prevented altogether. The soil must have a circulation of air or it becomes sour. As well, the plant roots need air. Clay soils when mixed with ample peat moss become fine loose loams. In garden soils that are extremely heavy clay it is wise to mix in some sand as well as peat moss. This aids in the drainage of the soil. Coal ashes or cinders will do best instead if sand is not available.

Peat moss is ideal as a carrier for the particular brand of chemical fertilizer or organic fertilizer that the gardener may use. Particularly for work around shrubs, bushes, for transplanting or for bulbs. The peat moss acts as storehouse for the moisture and the plant foods dissolved therein. The value of the plant foods is therefore greatly enhanced as they are not allowed to seep away and go to waste.

Anyone who has used compost in the garden realizes that he can seldom produce enough to properly enrich the soil. For this reason many good gardeners mix one part of their prepared compost with three to four parts of peat moss before spreading or mixing into the soil. By so doing, an immediate response is obtained from the compost bacteria and a long drawn out but continued action is assured from the slower decomposition of the peat moss and its soil conditioning properties in the meantime.

Another decided advantage of peat moss as a source of organic matter when compared with other forms of matter is that it is entirely WEED FREE. How many times have you heard gardeners complain that the manures or nice black top soil that they have purchased have brought forth in their gardens a lush crop of weeds. We get plenty of weeds any way without buying them in our garden materials. By using peat moss and a good chemical fertilizer, the gardener knows that he is not planting weeds, or introducing weeds to his soil.

Always mix peat moss thoroughly into the soil whether you are preparing a new lawn bed, a garden plot, or potting soil. This will ensure a well mixed and homogeneous soil. The exception of course to this rule is in mulching. For mulching purposes peat moss is unexcelled because of its high insulating quality.

Another point to remember is that peat moss is not a fertilizer. True, it has a source of organic nitrogen which over a period of years becomes available to the plants but this is very slow acting. So a well balanced fertilizer must always be used. If anything, a fertilizer with a slightly higher nitrogen content than usual is often practiced by some gardeners.

Fresh peat moss in its initial stages of decomposition in the soil utilizes a slight amount of the available nitrogen.

A final point to keep in mind when using peat moss is to thoroughly wet the peat moss before using. Put the peat moss into the soil wet. When you obtain a bale of peat moss from your garden store it is practically bone dry. Because the peat is compressed many times to compact it into the handy bale size, the peat moss might often be lumpy . . . that is it tends to stick together in lumps. Any lumps will immediately break up when the peat moss is properly wetted down. Further, wet peat moss is much easier to work with than dry — it mixes into the soil much better.

The proper and ample use of sphagnum peat moss will aid greatly in achieving and maintaining a rich fertile garden soil. Having a “Good Earth” practice in your gardening is the prime step towards a “Green Thumb.”
GARDEN SHELTERS

Gardens should be designed for living. They should express much of the personality of the owners. They should be planned to accommodate the hobbies and habits of each member of the family. They should be suitably screened so that they may be enjoyed in privacy.

Their usefulness may often be much increased by the addition of an appropriate shelter—a shelter from the hot sun or summer showers, a place to sit and eat or talk or loaf. This shelter should be planned to fit in with the design of the garden, and it may add much to the interest with its properly designed architectural features.
Above and on preceding two pages from the garden of W. C. Sterne, 1198 S. Franklin, Denver. Photos by Edgar E. Warren.

Simple and efficient garden shelter in garden of Dr. John C. Long, 1215 Monaco Blvd. Photo by Edger E. Warren.

Very attractive attached garden shelter at home of John C. Gates, 300 S. York. Photo by Earl Davis.

It may be a simple awning over a platform, a rustic pergola or an elaborate little house. It should be conveniently located and built of appropriate material.

Here are illustrated some of the effective garden shelters that have been created by Denver gardeners. Other gardeners may get some ideas from these pictures which might be helpful in planning a shelter for their own garden.

Convenient and attractive shelter attached to house.
CONSIDERING LILIES
Their Culture
MILDRED STEELE

LILIES have been garden favorites for untold centuries. During these countless eons, the original forms have changed but little. Such perfection could scarcely be improved upon. Horticulturists have aided the culture of lilies by carefully selecting seedlings that seemed more resistant to disease, and more adaptable to garden conditions. Also, the horticulturist has produced many fine hybrids. As to their virtues, compared to the species forms it is a moot question.

Lilies have been written about from the earliest recorded history, 2000 B.C., down through the ages in poetry and in prose. With the coming of the Christian era, the Madonna lily became a symbol of chastity, and was honored in works of sacred art. Today, the Lilium longiflorum is considered the lily for Easter, chiefly due to its convenient time of blooming in the greenhouse.

The distribution of lilies is widespread, but all are found in the Northern Hemisphere, and mostly in the temperate zone. Those coming from the tropics are from the cool highlands. None are from the desert regions. The “whys” of their distribution defy reason. Is it not strange that the very prolific and hardy Regal lily was found in one small, remote mountain gorge in China, and nowhere else? Practically all the trumpet lilies have originated in East Asia, except the Madonna lily, the oldest known to man, and there is no record of its origin. Recently it has been located in the wild, in the Beirut river valley, between Damascus and Beirut. It was found growing in rugged limestone cliffs in rock crevices.

Again, the Lilium Brownii, which is also a trumpet lily, largely cultivated in England, was brought out of China in 1835, by a sea captain, but has never been seen in its native habitat since.

Generally in the wild, lilies grow in association with other plants. In the Eastern and West Coast woodlands, the dwarf rhododendrons and azaleas provide the necessary soil shade for them, and support for their heavy flowering spikes. Not less occasionally will one see a handsome group of lilies blooming in a bed of briars or blackberry thicket. Most lilies prefer open woodland conditions, which means variable sun and shade, a light ground cover, and humus in the top soil. It is an occasional lily that seems to prefer a bog, but by careful observation one generally learns that the bulb is dry part of the year. The Madonnas and the Sargent lilies both have natural drought part of the year, and thrive best in places where drainage is thorough.

Ways of adjusting lilies to the individual garden is problematical and requires considerable ingenuity and thought. Sometimes one must make numerous attempts before the right conditions are found. One cannot always change their shade and drainage conditions, so it is not wise to buy expensive bulbs until the conditions have been studied. It is wise to invest in a good lily book before becoming a “fancier” and follow the advice given as well as one can. Also, study the planting instructions that the better nurseries send out with the bulbs.

One must allow plenty of time for the new bulbs to become established before expecting them to flower; often 3 to 5 years, and frequently there is no top growth the first year. Hence, weeding must be done by hand, with the utmost care, because breaking off the first tender shoots or stems will weaken the bulb, and more frequently than not, the bulb will die. Too much water is dangerous for new bulbs, as it causes these same tender shoots to “damp off,” resulting in death for the bulb also. Staking and labeling each new planting is essential for aiding the memory and avoiding needless disaster. It is indeed gratifying to have a choice and long-anticipated lily come into flower after so long a wait, and careful nursing.

Soil for lilies requires careful preparation. It has been said that any soil suitable for potatoes is good for lilies. That is not such bad advice as a generalization, and for lilies of easy culture. For the more difficult sorts, it is essential to have an adequate stock pile of peat, granite sand or river sand, limestone chips, pine needles or excelsior, and bone meal. Each planting requires its special formula, and here again, a lily book will be of great worth. For the beginner, it would be well to start with lily varieties whose requirements resemble one’s own garden conditions.

When new bulbs come from the nursery, they must be planted with all haste, as the longer a bulb is out of the soil, the less are its chances for survival. The enclosed planting directions must be carefully followed. Do not use commercial fertilizer (except bone meal) or animal fertilizer in the planting. Experiments are being made with commercial fertilizers, but the results are not yet conclusive. Since all lily plantings require a mulch of one kind or another, it is a major problem that needs careful attention. I have personally experimented with wood shavings as a mulch. In some plantings it is very successful with peat. Planting depths are also of greatest importance, and are generally specified on the enclosed directions sheet. Small bulbs are planted less deep than large ones. Stem rooting bulbs are the most deeply planted, while those with basal roots only are in shallow soil, with the Caudatum and Testaceum being the most shallow planting of all, approximately 3” deep.

Time for planting lilies is in the fall, as soon as the flowering spikes have ripened. Caudatum and Testaceum are planted in August or early September. Those lilies that flower very late are frequently kept in cold storage during the winter, and sold the following spring. These bulbs seldom flower the first year.

Diseases in lilies are a more than considerable problem. Too much for the casual gardener to worry about. It is wise to buy lily bulbs only from a specialist, not just to have them correctly named, but to obtain disease-free bulbs in the first place. Those lilies extremely susceptible to disease often flower beautifully for a season or two and then disappear. One just replaces them and enjoys them for their short duration.

When one cuts lilies, at least 2/3 of the stem should be left for ripening the bulb. Only lilies that propagate themselves rapidly should be cut, others should be left to enjoy in the garden. Lilies are at their best in a group planting with a background of evergreens, thick shrubs or a hedge. A preferable location is one that will allow plenty of water while the bulbs are preparing to bloom, and likewise endure the sparse watering necessary when the bulbs are ripening. When using lilies in the border, the bulbs have a tendency to deteriorate because of excessive water. It is therefore advisable to have a special bed to propagate replacement stock.
A SILVERY-GRAY GARDEN

By M. Walter Pesman

WHAT slaves we are—of tradition and of the “Joneses”!
Just because the green garden is the accepted thing, and has a long lineage, we all make dutiful imitations of the green garden that fits Great Britain, that fits New England, and much of the so-called cultured world.

And in the meantime—nature around us uses its own color scheme, often quite different from the lush-green of Devonshire and the Adirondacks. Don’t we see it?

Yes and no. Being brought up with the idea that foliage is yellowish green, and that snow is white, we conceive them as such, and if we are painters, we paint them as such.

Until—until a child or an insurgent artist paints snow a deep-blue, and trees a silvery-grey. Then we are enabled to notice these things ourselves. We have had our eyes opened.

Some day I hope to have the opportunity to “do a silvery garden.” Contrasted with our Colorado sky, and in keeping with a number of our native plants, it will be recognized as an attempt to make a Rocky Mountain garden fit the Rocky Mountain landscape as well as the Rocky Mountain climate.

No, it won’t consist of native plants only. A Russian Olive and a Silver Poplar look just as much “at home” here as a Silver Spruce or a silvery Sagebrush, even though they did not originate in this particular region. Plants—and people—may fit and belong in Colorado while hailing from similar places, or even from dissimilar spots, having the—shall we say—the Rocky Mountain instinct?

Will the silvery-gray garden be monotonous? Not the way I envision it, no more than the time-honored green garden is monotonous. Gray in one case, like green in the other, is merely the backdrop, the atmosphere of the scene.

As the season progresses the other color accents will change; all, however, will be enhanced by the gray setting.

In early spring our rose pinks could wish for no better background; a little later we may find scarlets and yellows in contrast with the blue-greens and grays; still later, when hot summer days bid us to relax and find the pleasant shade, what more soothing color can you ask for than blue flowers against silvery foliage.

Fall is not hampered by any summer precedent, it uses its own palette, irrespectively. Certainly our silvery-gray garden will not interfere with nature’s self-imposed color scheme, and will admit plenty of good fall color. Yellow, of course (or should we say golden?), is predominant in Colorado, and may provide the proper psychology in the “Silver-and-Gold” state.

What Material to Use?

As has been intimated above, we can hardly think of this type of garden without the use of Russian Olives. Immediately the Waring garden at Ninth and Gaylord Streets comes to
mind. Here is a blending of the pastel green of the residence with the silver of Russian Olives that is responsible for much of the atmosphere of the place—unescapable atmosphere!

Almost breath-taking in beauty is Russian Olive in the latter part of May, with its delicate silvery leaves. If you want a spring effect in your garden, at that time unforgettable, plant a good-sized group of Oriental Poppies where they’ll show in front of Russian Olive. (It might be just as well not to feature that spot later in the season: the foliage of Oriental Poppies a month or two later is nothing to boast about.)

Shrubs with silvery foliage are Buffalo Berry (Shepherdia argentea) and Sea Buckthorn (Hippophae rhamnoïdes, and others). Both are best in youth, both have red berries, at least the female individuals, where they can be pollinated by the male flowers. A less well-known Buffalo Berry is the native Russet Buffalo Berry (Shepherdia canadensis), common on north slopes in the montane zone. It is a low shrub, almost a ground cover, that requires a shady spot.

Almost its exact opposite in culture requirements is another gray-foliage plant of the same size: Leadplant Amorpha, Amorpha canescens. It is good for dry, hot places, and it is in such locations that its violet blue flowers in June show up to their best advantage.

The character of its foliage immediately makes us think of a host of other gray-leaved native plants. Foremost among them is, of course, our much-glorified Western Sagebrush, Artemisia tridentata; poets and songwriters get emotional about it, legend and literature have developed about it. Can we use it in the garden?

The “wild garden” certainly should feature it; and I am sure that it will be used in the humanized type of garden as soon as some enterprising nurseryman makes it available. Perhaps all it needs is a landscape architect to act as its publicity agent. Cultivated and properly cared for, it is apt to look like a respectable member of our shrub society. Incidentally, Standardized Plant Names calls it Big Sagebrush: it does grow as high as twelve to fifteen feet in spots. Another name, commonly applied is the Black Sage.

Even more claim on garden recognition has the Silver Sagebrush, Artemisia cana, a beautiful silvery shrub, up to three feet.

Among the dozens of sagebrush species, called wormwood in the old country, others are worthy of cultivation. The low Fringed Sagebrush, Artemisia frigida, makes a neat silver border, unique in its kind. It grows native in plains and mountains, and used to be considered a remedy for mountain fever by early pioneers.

Remember “Old Man”? It’s another artemisia, A. abrotanum, and you’ll find it in many an old-fashioned garden, often as a low hedge; children love to crush its leaves for the pungent odor.

Silverking Sagebrush, is Artemisia albula, commonly used in the perennial border for its silvery color, as is the Ghostplant Wormwood, Artemisia lactiflora, for its fragrant masses of white flowerheads in September. Weedy? Yes, or shall we say, self-reliant.

And now, as I review in my mind all the grayish native shrubs available for this garden type, I am overwhelmed: there are so many of them. There is Bush Cinquefoil, Potentilla fruticosa (Gold Drop is a specially fine variety), there is Bush Rockspirea, Holodiscus densus, with its creamy or pinkish flowers, Apache-plume, Fallugia paradoxa; Clifflrose, Cowania stansburyana; Antelope Bitterbrush, Purshia tridentata; Fendlerbush, Fendlera rapicola, a hardy shrub of the Mockorange group; and there is that choice Tansybrush, or Desert-sweet, Chamaebatiaria foliosa, with its fernlike leaves and beautiful white blossoms. All these are really choice flowering shrubs.

Less choice are the Mountainmavongies, Cercocarpus, and the gray willows, such as Salix exigua, the Coyote Willow, and Salix irrorata, the Bluestem Willow (an excellent "pussywillow").

Enough to show that the silvery-gray garden is a very real possibility, not a wild artist’s dream. Some enterprising garden lover, with enough pioneering spirit and passion for the West, is going to venture upon it. He or she will make mistakes in judgment. Some plants will have to be kept in check, others will need special "petting". The proper "ecology" will have to be sensed.

What a restful garden it will be, with the silvery blue spruce and Silver Cedar as a background, Russian Olives in group formation, masses of purple-blossomed Persian Nepeta (Nepeta mussini) and of Woolly Speedwell, Veronica incana, in summer.

What new color combinations it will present! What new problems it will present!

Shall we use a gray groundcover instead of bluegrass? Rocky Mountain Pussytoes for instance? Or shall we use green as a "foil" to show off the gray symphony to better advantage?

When we get that Rocky Mountain Botanical Garden in running order, more than likely a collection of grays and silvers will receive consideration. Before long this region will make its contribution to Garden Art, comparable to that made by Italy, by England, by the Moors of Spain.

There is a luminous quality about this sunken garden path of the Runnette garden at 118 S. Humboldt. Blue morning glories are showing their best against Silverylace Vine, and the Japanese Avenenes are enhanced by a background of Snow-in-summer. Photos by author.
THE HOME GREENHOUSE
By ERNEST CHABOT
Author of "Greenhouse Gardening for Everyone"

NO LONGER is a home greenhouse considered a luxury. Now for prices that start at less than $300, anyone can put up a practical, small, prefabricated glass garden. One that will hold an amazing quantity of plants and flowers to bring joy into the home long after snow flies. Several styles and sizes of greenhouses and lean-tos are available.

A small home greenhouse in the clear sunshiny air of Colorado is especially appropriate. The commercial growers have demonstrated the advantages found here by their world famous carnations. The home grower can also take advantage of these favorable growing conditions by growing a wide variety of ornamental and useful plants.

The Heating
Heat for the home greenhouse is a simple matter with the modern equipment available. A new closed flame burner for natural gas provides clean, inexpensive heat. A flue carries off the products of combustion. This heater can also be used with bottled gas, where 100% natural gas is not available. Of course, artificial or mixed gas should never be used in any greenhouse since the fumes are death to plant life. Frequently, the house heating system can be extended for the greenhouse regardless if it is from a steam, hot water, or hot air plant. There are also oil burning, electric, and open flame natural gas heaters. All may be thermostatically controlled, and made especially for greenhouse heating.

What to Grow
A greenhouse is not a hothouse as many of the uninitiated seem to imagine. Most of the finest flowers that grow do best at a night temperature of 45° to 50°. These include such delightful things as anemones, asters, marguerites, carnations, cyclamen, snapdragons, camellias, stock, sweet peas, we could go on and on. Of course, if you are fond of gerbera, gloxinias, poinsettias, gardenias, bougainvillea or potted roses, a night temperature of 60° should be maintained. Then, of course, there are orchids, and if you like them, don’t let that old notion that they are difficult or too costly stop you from growing them. Orchids are fairly easy and the plants are not so very expensive in comparison with their yield, that is, unless you want to go in for the rare and unusual ones. There are companies that make up excellent collections that can be bought for as little as $50 to $100. Unusual, exotic plants are another group that provide a fascinating hobby. There is just no end to the possibilities. You have limitless numbers of cacti, succulents, and delightful flowering bulb plants from Africa, Asia, South America, Japan and our own south and west. There are also rare and beautiful tropical plants.

Vegetables
In addition to flowers and ornamental plants, you can have fresh vegetables, too. Of course, in a small greenhouse, you can’t grow everything, but there are certain vegetables that do well which you might like to try. Fresh greens from your own greenhouse are grand to have to garnish your table during the winter. Crisp lettuce, radishes, Swiss chard, chives, and parsley might be grown profitably in an unused corner. You could also grow tomatoes, cucumbers and melons in the spring, summer and fall. They reach an excellent height of perfection under glass. Of course, to grow these three requires a warm temperature—70° at night—so they are hardly profitable in the cold days of winter.

Herbs are fun, too, and take a comparatively small amount of space. Try chives, basil, tansy, marjoram, rue and others.

In the springtime, the seedlings that you raise for your outdoor garden are one of the most profitable things you do in a small greenhouse. Plants for the vegetable garden such as cabbages, cauliflower, tomatoes, egg plant, peppers, to say nothing of plants for your flower beds and borders; marigolds, zinnias, petunias, cornflowers, verbena, nierembergia, begonias, lobelia and many others.

Health in the Sunshine
In addition to the fun with flowers you have in the home greenhouse, there is the health side. The escape from the care and tension of regular routine that gardening under glass brings. It provides that change we all need especially during those bleak days when we feel winter will never end, and most of our time is spent indoors. It is surprising how taut nerves seem to loosen up almost magically, for there is that certain something that gardening in the warm sunshine does to set you up and keep you fit that nothing else can. All that is needed to make it a reality, is a winter garden under glass.
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New Books Received During Month of June

(Most of these are old and are now out of print.)
The Floral Offering—The Language and Poetry of Flowers, by Henrietta Dumont, 1856. You may not put this book aside once you pick it up. It also contains colored illustrations from original drawings.
The Primulas of Europe, by John MacWatt. In this book particular points of cultivation are dealt with and one may, with a very slight expenditure of time and care, obtain an immense amount of enjoyment, and, "speaking from my own experience," the writer says, "the more one becomes acquainted with this family, the more one's interest grows until it is a delight to acquire additions to the collection and win success with some kind which has erstwhile taxed both skill and patience."
Memoirs of the Botanic Garden at Chelsea, by Henry Field and R. H. Semple, M.D., with illustrations, plans of the gardens and a catalogue of the plants.
Where Did Your Garden Grow? by Jannette May Lucas. Reading this book is like making an exciting voyage of discovery for boys and girls as well as for their parents. Do you, boys and girls, ever stop to think that all the flowers growing in your garden are wild flowers? The author tells of Tulips, Lilies, Daffodils, Zinnias and Gladiolus and their travels from China, Persia, Turkey, Europe, Africa, Mexico, South America and even those from our own United States, to the famous botanical gardens of Europe and eventually to our gardens of today. Illustrated fully with maps, drawings and decorations in color and in black and white.
The African Violet, by Helen Wilson. We now have two copies of the story of America's no. 1 houseplant with complete culture and classification.
The Voice of the Garden, by Abram Linwood Urban. It must be true, if our faith in Christ is true, that the only cure of every human ill is spiritual. This book will help to satisfy man's spiritual hunger. "May this book bring many to grow gardens in their homes and hearts."

Poisonous Plants in Field and Garden, by the Rev. Professor G. Henslow. We have received many calls for a book of this kind.
Iris Culture, by Pese and Spender. Amateurs have often expressed the wish for a book on Iris which they can easily understand and which is not too full of purely botanical facts. Here is the book for them. Of course, if they wish to study further, the great work on Iris of the large, well-known monograph by W. R. Dykes, The Genus Iris.
Farrer's Last Journey, by E. H. M. Cox. Few botanical travellers or horticultural writers have a larger following than has the late Reginald Farrer who died in 1920 while collecting plants in the Burmese Alps. His two books on his Chinese expedition, "On the Eaves of the World", and "The Rainbow Bridge", are now classics of their kind.
A trip was decided upon in five minutes and in fifteen minutes more it was to be somewhere in Upper Burma, but with only a vague idea as to the exact place. The author says that they just bolted from England on the first available steamer, only too thankful to be off to some country where there were high hills yet to be explored.

Mr. Cox, who was with Farrer in his last journey, describes the wonderful land which they searched for plant treasures. The horticultural interest of Farrer's journey will appeal to keen gardeners, while those who have fallen under the spell of Farrer's personal charm, which pervades all his writings, will find added attraction in the new facts quoted from his letters.
We have received many more books this month which will be listed in the August issue of the Green Thumb.

Helen Fowler.
THE auction of "Antiques and Horribles" which was held on May 20th marked a significant milestone in the development of the Colorado Forestry and Horticulture Association. At final reckoning $901.37 had been received from this event. This will help to balance our badly unbalanced budget and will encourage us to increase our many projects for the advancement of horticulture in Colorado and the Rocky Mountain area.

Many of the older horticultural associations and garden centers in other cities have adopted similar events to supplement their income from memberships. Even though we found it necessary to raise the minimum membership rate to $3.00 beginning July 1st, this will not cover the cost of the services that we have been giving. Just the publication of "The Green Thumb" will exceed this considerably.

Of course an affair like this does not run itself. There must be a few who take the responsibility for planning, arranging and advertising. Mrs. Alexander Barbour accepted the position of chairman of this auction and worked hard and long to make the necessary arrangements and to interest the necessary helpers. Mrs. George Garrey, Mrs. Everett Parker, Mrs. Karl Arndt, Mrs. Richard Davis and many, many others, ably assisted Mrs. Barbour in this work.

**Horticultural Terms Explained**

Repens—creeping and rooting on the surface of the ground—Veronica repens.

Serrate—toothed like a saw as at the edge of an apple leaf. Some leaves are doubly serrated as the elder.

Saxatils—inhabiting rocks —Alysum saxatile compactum niger-black.

Tunicated—having broad overlapping scales as the lily.

John Swingle, (who should now rate the title of "Colonel") made a most valuable contribution by his effective auctioneering of the donated material as well as his solicitation of donations. Richard Osborne also assisted in the auctioneering. Mrs. Philip Emery and Mrs. Paul Hastings handled the clerical and financial end.

Many good friends of the Association looked around their houses for really fine and valuable items that would bring good prices at the sale. Without the great generosity of all these people the auction would never have been possible. We cannot thank these people enough for all their kindness and generosity and we also feel sure that those who bought at the sale are also very grateful to them.

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JULY GARDENING
JULY sees the garden in the stage just beyond the grand spring rush of flowering shrubs and early perennials. There may be a slowup as the weather becomes hotter and drier. Watch the watering especially, encouraging the roots to go deep by thorough but infrequent applications. Some kind of soil-soaker is good to allow the water to run in a small stream for a long time without washing.

Right after blooming is the proper time to do the necessary pruning on most ornamental shrubs. Avoid taking out ALL the lower twigs or shearing off the top. Cutting out a few large, overgrown stems each year will assure a naturally shaped plant for many years.

Frequent and shallow cultivation will keep down the weeds so that they can not interfere with the growth of the desirable plants. Mulching will do this same job about as effectively and will give added benefits of retaining the soil moisture and furnishing nourishment. Use the new weed killers with extreme caution as a minute amount coming in contact with certain susceptible plants can do severe damage.

The biggest garden job in July is usually pest control. All-purpose sprays and dusts are fine for the really busy or lazy gardener, but all the real gardeners will want to learn how to recognize the damage done by the ordinary insects and what the best control is for them. Unnecessary sprays may kill many beneficial predators of the harmful insects. There are many new insecticides on the market now which are very effective when properly used but they may do much damage if not used in the right way.

If you have not already started a garden diary, do so at once, now that it is fresh in your mind. All the little improvements that would be desirable in your garden, next fall or spring, at planting time you will have forgotten. There may be clashing color combinations, or tall plants hiding short ones or rampant growers crowding out the nicer but weaker things. Make a note now of all these desirable improvements.

Picture on rear cover of the native Soapweed, Yucca glauca.
EDIBLE NATIVE PLANTS
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A SILVERY-GRAY GARDEN