

NWP
635
G213



by

The Garden man

GARDEN EDITOR OF VANCOUVER SUN.



Published by

SUN PUBLISHING CO. LTD., VANCOUVER, B. C.

Have You
Garden Problems?

If So

Write to

The Garden Man

Care of

THE VANCOUVER SUN



This service is free
to all readers of
The Vancouver Sun

Introduction

In the following pages a few hints on gardening will be found, together with a monthly summary of what should be done in the garden in any particular month.

While of necessity many details have been omitted, the most vital phases of gardening have been dealt with in the hope that they will be of service and help to readers.

Amateur gardeners, and these notes are entirely for that class of gardener, are always running up against many problems that sometimes seem hard to deal with. In this case you are invited to send your problems to "The Garden Man," care of *The Vancouver Sun*, and they will be answered as far as is humanly possible, only I would ask you to remember that I am not infallible but will answer your letters to the best of my ability.

This year, more than ever, it is absolutely essential that we should all grow more vegetables and fruit in order that we can save money and thus be able to get behind the war effort just a little bit more. Further than that it not only gives us something to do that is useful, but gives us a great deal of enjoyment and healthy exercise so that we shall not go away from home perhaps as much as we did in more peaceful times. Thus saving money in another way, to say nothing of gasoline, oil and rubber.

Out of evil cometh good, and as a result of the murderous, diabolical, scheming minds of the dictators many people will get to take up a hobby which they did not have before. And once having taken it up will wonder how they got on without it in the past. They will lead much more healthy lives, and enjoy the fruits of the good earth a great deal more.

**GROW MORE VEGETABLES—
DIG FOR VICTORY!**

What To Do In The Garden Month By Month

JANUARY

A good deal of the work to be done during this month is, of course, dependent on the weather. If the ground is frozen and covered with snow you cannot do much, but you can spray your fruit trees, more especially your peach trees. For this use Bordeaux mixture. For apple and other trees use lime sulphur spray. Go around your frames in which you have violets and see that none of the leaves have turned yellow. Remove them if they have, and give them as much air as possible. Get together all rubbish, such as dead flower stems and fallen branches, and burn them.

If the ground is free from frost or just a little frozen give your vacant soil a good digging over. Do not rake it, but leave it broken up. This will ensure the frost getting at the weeds.

INDOORS: Take out all bulbs that you have forced and have finished flowering. Put them in the basement or outside, or if possible bury them in some spot where they can be left for a year or two. Remember that bulbs that have been forced once cannot be used for the same purpose again. They must be given a complete rest.

If you have a small greenhouse you will find plenty to do, and you can sow many seeds in order to get early blooms.

BASEMENT: Many odd jobs can be done, such as painting your cold frame if it is empty, repairing the lights, and going over your garden stakes, giving them a coat of paint and cutting out any parts that may have rotted during the year. Give your bulbs, such as gladioli, the once over. See that your potatoes that are stored in the basement are not sprouting, and that none have gone bad. If this is found to be the case, be sure to destroy those that have as they will contaminate the others, and your food supply as well as your seed supply will be ruined.

Keep an eye on all your house plants for flies and other pests. If the weather is fairly free from frost put your house ferns out of doors for an hour or two whilst it is raining.

FEBRUARY

Start to prepare the soil for your early vegetables, such as peas and broad beans. Sow the beans towards the middle of the month, or as soon as the weather will allow you to do so. Prepare the trenches for your garden peas, but do not sow them yet.

Dig over your ground whenever possible, and give your early spring cabbages a dressing of lime.

Look over your rockeries and see that no stones have become out of place on account of being riven with a heavy frost. Also see that none of the sempervivums or encrusted saxifrages have been riven out. If this

is found to be the case, press them down firmly with your foot. Many of your primulas will be showing up, and if the weather is mild many will be starting to bloom, more particularly wanda and the English primrose. See that there are no weeds springing up amongst them. Remove any known early weeds that may have grown up in the rockery, but be careful not to disturb any seedlings that may have grown from other plants. Also remove any dead foliage that may be lying around. Put this on your compost pile, or heap to be burnt.

Limewash your fruit trees and spray any others that you could not do last month. Cultivate the soil well around the roots of all your fruit trees, both large and small.

Sow sweet peas in the house, starting them either in small pots or egg shells. If you have a greenhouse or hot frame sow seeds of cabbages late in the month.

In the flower garden start to take cuttings of indoor and outdoor chrysanthemums, and divide up any perennials that have grown too large. Towards the end of the month the crowns will start appearing.

Rake and brush the lawn well and give it a good dressing of finely sifted soil and fresh water sand. If any moss is appearing, deal with this as is laid down in instructions about lawns, and give it a dressing of agricultural lime.

In the basement, mend and paint up any garden furniture that may be there, and also go over all your garden tools and see that they are in good shape. Take out the shears and give them a good oiling. Make labels, and, if necessary, repair flats.

MARCH

Attend to your raspberry canes, taking out all the old ones that bore fruit last year, cutting the new ones back to eight feet and tying them up, or keep them in place by placing stakes along them which are strung with two strands of wire. Go out into the bush and gather sufficient pea sticks. If you kept them from last year go over them and see that they have not rotted. Prepare the vegetable garden thoroughly by digging over all that part of it that you have not done so. Prepare your trenches for sowing gardens peas, and drills for root vegetables.

If you grow potatoes a very early crop can be put in towards the end of the month, but be sure to see that they are not planted in land that has been limed. Finish pruning your fruit trees if you have not already done so, and give your peach tree another spraying with Bordeaux mixture.

Many flowers will be starting to bloom in the rockery, and you can also start tidying up by removing any weeds and surplus seedlings that may have grown during the winter. Give your encrusted saxifrages a dressing of lime, and repair any damage done to the mossy ones by burning last year. This is easily done by separating them or putting some good soil on the burnt spots.

Tie up and train the new shoots of your rambler and climbing roses, and spray them well with Bordeaux mixture. Prune your rose bushes

well down and give them a mulching of well rotted manure. These should be well sprayed also with Bordeaux mixture or a good general purpose spray.

Prepare your sweet pea trench for sowing the seeds and planting out the young seedlings which you started in the house. If, however, you did not dig this trench in the fall you should do it at once. Put plenty of well rotted manure, leaf mold and bonemeal in it.

Start sowing practically all your annuals under glass, either in a cold frame or greenhouse.

Mulch up your paeonies and take any covering off your hydrangeas if you covered them up in the late fall. Tidy up forsythia, japonica, and if you have a cedar or evergreen hedge start pruning it.

Pick your violets every day, and remove any dead or decaying leaves.

Rake all the dead grass from your lawn, and at the end of the month give it its first mowing. Do not, however, cut it too close at first. Go over the lawn thoroughly when you have done this and dig up any plantains, dandelions and other pests that may have grown in it since the fall.

Spray your lilac trees and cut out any suckers that have grown there, and if you failed to do so in the fall cut off any dead blooms that may be there.

Remove any dead leaves and other rotted and floating vegetation from the pool, and take away any dead leaves of iris that may be around it.

And from now on keep the hoe working and take out any weeds that may be growing, and there will be plenty, but the liberal use of the hoe not only keeps them in check but also cultivates the land.

APRIL

One of the busiest months of the whole year. After the young cabbage plants have been hardened off you can plant these out, but be sure to put a handful of lime in each hole you put them in. You can also start sowing your main crop of garden peas, beets, leeks, parsnips, carrots and all root crops. These should be sown in the drills you made for them last month. Put pea sticks around your first crop of peas. Sow radishes and plant out young lettuce plants. Prepare your hills for vegetable marrow plants, which should be sown in small pots now, in a cold frame or greenhouse. Towards the end of the month plant out young tomato plants, provided they have been hardened off properly. Sow parsley and other herbs. Plant your main crop of potatoes and bush beans. At the end of the month plant your scarlet runners.

Put out all the bulbs that you have forced during the winter, with the exception of Roman hyacinths, which are no more good after being forced and should be thrown away. Give all your house plants, such as cyclamen, begonias, poinsettias, a complete rest by putting them in the basement or some cool place and withholding water from them.

Put out your house ferns in a shady spot in the garden and give them a watering with weak soot water, and then let them rest.

Plant out the geraniums that have rested during the winter, and plant your gladioli bulbs, but be sure to treat them for thripss before you do so. Divide and plant out your dahlia bulbs. Divide up some of the hardy perennials, such as the rudbeckia mallows, helenium, Michaelmas daisies, Shasta daisies, gaillardia, thrift, Oriental poppies. Sow other poppy seeds. Sow sunflower seeds in the open, also seeds of many other annuals that do not have to be sown in frames, such as South African daisies, portulaca, and many others.

Start mowing your lawn regularly and put in more seed in any bare patches caused through taking moss out of it. You can now start cutting it a little closer, and in this regard see that your lawn mower is sharpened and well oiled.

If you have any spots that you want to cover up, such as a board fence, sow canary creeper now. Prune your ivy and give it a good hosing.

Prune your privet, laurel and boxwood hedge, and also other evergreens that may be used for the purpose.

Keep a sharp lookout for mosaic fire and other diseases of your tulips, and if you do find any trace of either of these diseases rogue them out immediately.

Pot your indoor chrysanthemums that have taken root in the cutting box into three-inch pots. Plant out the rooted cuttings of your outdoor chrysanthemums in the place you want them to be.

MAY

Another very busy month. Sow beets, parsnips, carrots and other root vegetables, also bush beans, and if you have not already done so, runner beans. Get in main crop of potatoes, and if any of your very early crop are showing, earth them up. Towards the end of the month keep a sharp lookout for black fly on your broad beans, and if you think they have grown as tall as they are going, and are in flower, nip the tops of them off. Then spray them well with soapy water and nicotine sulphate. There will be no chance of black fly if you do this. Stick all your crops of peas, and see that the poles or string for the runner beans are in place.

Plant out young marrow plants, but if you grew them from seed in a cold frame or hot house be sure to harden them off before you do so. Sow second crop of radishes and mustard and cress. Keep the Dutch hoe working in and around the young seedlings, in order to keep the weeds down, which will choke them if this is not done.

This is the most beautiful month of all in the rockery, but there is much to be done. The most important thing of all is to weed it, as by now all the young seedlings will have shown up. These should be either taken up and put in some other spot or given away to less fortunate friends. Give your encrusted saxifrages a good dressing of lime around the roots, and get some iron filings or old rusty nails and put them around the roots of your gentians. This will improve their color greatly. Towards the end of the month many of the bulbs will have finished flowering, such as crocus, early miniature daffodils, muscaria, snowdrops, and such things.

Go around and plait up all the leaves, but do not cut them off. This will make the rockery look tidy and prevent the heavy leaves from flopping all over the place and very often covering up some of your choicest plants.

Give your raspberries and small fruit trees a good mulching with grass cuttings or well rotted manure, and see that there are no weeds around them.

Put your indoor chrysanthemums into five-inch pots, and put out your rooted cuttings of outdoor ones. Give them plenty of fertilizer when you do so.

Mow your lawn regularly, and also give it an occasional raking. Put your grass cuttings between the rows of carrots, onions and turnips, and sprinkle them with coal oil. This will combat the carrot and onion fly.

Get your garden furniture out and put it where you want it to be, and see that it is in good shape and needs no more repairs other than you did during the long winter months.

Go around all your rose bushes and see that there are no pests on them. If there are, take the proper precautions to deal with them, and also keep a sharp lookout for mildew on your climbing roses. This is very prevalent when they are growing up against the side of a house. Dusting with fine flowers of sulphur will control this.

Sow seeds of wallflowers for next year's stock. Many people put this off too late. These can be sown outside or in a cold frame.

At the end of the month lift all the tulip bulbs that have finished flowering, and heel them in some spot in the garden where they can die down. Dig the ground over well, as this is where you will plant out your annuals, many of which can be put out after the middle of the month.

Feed your lilac bushes well during this month with a good commercial fertilizer, well rotted manure, or liquid manure.

JUNE

Yet another very busy month. Plant out your winter greens, such as Brussels sprouts, broccoli and kale, but try to do so on a damp, dull day. If the plants are large enough put out your leeks in rows about ten inches apart. As the cauliflower seedlings are ready, plant them out, but be sure to give all the cabbages plenty of lime around their roots, as this will prevent club root. Also take all the necessary precautions to deal with the cutworm.

Thin out half of your carrots so that they will have plenty of room to grow and give you an early crop. See that the garden peas have plenty of moisture at their roots.

Cut off all old blooms of arabis, aubretia, and the phloxes in your rockery, and also cut many of these plants back, as this is their growing season and they are apt to ramp all over the place. Also, this will give you more bloom later on. Cut off all seed pods of the prostrate brooms. Keep the cultivator well working so that no weeds are growing in between the rocks. See that the grass around the rockery is not growing into the stones, and if so cut a small bed around it.

Continue to plait up the foliage of any of the flowering bulbs, and cut off all dead bloom of all flowers. If you are keeping seed of any particular thing, just keep one or two pods for the purpose.

Lift up the rest of your tulips and heel them in as you did last month. Plant out the rest of your annuals. Stake up all your tall growing plants and keep a very sharp lookout for rust on your hollyhocks and mildew on your perennial phloxes and delphinium. In either case at the first sign of it dust underneath the leaves with fine flowers of sulphur. Also see that there is plenty of air space between these plants, or in other words see that they are not overcrowded and that there are no weeds growing amongst them. It is another case of keeping that hoe working.

Take cuttings of pinks and heaths. The application of a little peat around all the heathers will do them a lot of good.

Where you have sown seeds of annuals in the garden itself thin them out well. Remember that they are fairly large plants and want lots of room.

See that the string or net that you have put up for your sweet peas is tall enough and in good shape, and be sure to see that the plants are kept well watered at their roots only. Do not on any account water the vines, and if the weather is very rainy keep a very sharp lookout for mildew. Flowers of sulphur also cures this.

See that your violas are not infested with the red mite. If this is found, dust the plants well with nicotine dust. You can also take cuttings of these during this month. Take cuttings of pinks, and at the end of the month start layering your carnations.

Keep the spray on your lawn whenever it is required and watering regulations will permit. Also keep an eagle eye out for weeds in your lawn, as this is the time of the year when they start making their unwelcome appearance.

JULY

Spray your potatoes with Bordeaux mixture and continue to earth them up as often as they need it. Your very early crop should be producing tubers by now, and if this is the case they should be used. Your broad beans should also be bearing, and as soon as they are finished you should lift up the vines and dig the ground over thoroughly, and after it has been left for a while, raked over and used for planting out winter cabbages. Continue to sow radishes as required, and also plant out more lettuces. Start feeding your outdoor tomatoes with liquid manure. Gather your crops of early vegetables, such as peas and beans, and dig over the land as soon as they are finished. You can sow seed for a late crop of peas as soon as you have the space. Keep all others well watered and cultivated. Thin out your carrots, beets and turnips. As soon as your cold frames are empty dig the ground well in them and get them ready for sowing spring cabbage seeds next month. Start earthing up your leeks, and bend all the stems of your onions over.

Continue to cut back the phloxes and other such plants in your rockery, and continue to cut off all dead blooms. See that this part of the garden

has plenty of water, and do not allow the soil to dry out. Take cuttings of the rock daphnes and other small flowering shrubs.

If you have any bare patches that you want to cover up, plant out some of the smaller growing annuals in them, such as Tom Thumb nasturtiums, nierembergia, and things of that nature. These will give you color when all the early spring flowers have finished.

Pick your sweet peas every day and see that they have plenty of water. After your lupins have finished flowering cut down all the flower stems. This will give you bloom later on, and more especially in the case of Russell lupins. See that all the tall growing plants in your perennial border are properly staked up. Also stake up some of the taller annuals, such as zinnias, asters and salpiglossis.

Layer your border carnations, and also take more cuttings of pinks.

As this is the month when you enjoy your garden, see that the lawn is kept well mown and the beds are tidy and free from weeds. Remember that this is your outdoor living-room, and therefore should be treated more or less the same as your indoor one.

At the end of the month start sowing seeds of perennials if you need any further stock, more particularly the primulas, mecanopsis and aquilegias.

Put your indoor chrysanthemums into eight-inch pots and sink them in the soil outside.

AUGUST

An easier month. This is the month when you can more or less lean back and enjoy the benefits of your labor during the year. Yet there are certain things that must be done.

Sow seeds of spring and red cabbage, and cauliflowers. If they are ready at the end of the month start planting them out in the place you have prepared for them.

Keep your vegetable marrows well watered with liquid manure, and this also applies to your outdoor tomatoes. Be sure to keep all side shoots pinched off from these plants.

As soon as your various crops have been gathered, dig up the plants and dig the soil over thoroughly. Leave it so that the sun gets at it well before you rake it over.

Continue earthing up your leeks, and as soon as they are ready lift up your onion crop and dry them out thoroughly before you put them away.

Put all vegetation, both weeds and old pea vines, beans and potato haulms on your compost heap. Remember that this is your next year's supply of leaf mold.

There is not much to be done in the rockery, except to keep it tidy and many of the plants cut back. By this time all the foliage of the bulbs will have died down and should be removed. Keep it well watered and keep a sharp lookout for weeds. Scratching every now and then with

a little hand cultivator will do a lot of good. It will also help to conserve the moisture.

If the lilies in your pool have grown too prolific take a few of them off. Be sure, however, to cut them off just above the root and not at the top. In order to do this properly it may be necessary to wear gum boots, but it will pay you to attend to these. Many people seem to think that they do not want any attention, but just grow.

Cut off all the dead blooms from your rambler roses and also other rose bushes. See that none of the bushes have developed black spot, and at the first sign of this cut off all affected leaves and burn them. Then give the bushes a good spraying with a good fungicide.

This is the month when your lawn gets its hardest wear, and for this reason it must be well looked after. Raking occasionally with a bamboo rake and continually mowing it are the only things to be done, but of course it must be watered on every possible occasion. If, however, you have been unfortunate enough to get brown patch, or it has got burnt up, treat it with one of the many preparations that are sold for the purpose. Brown patch is a disease which should be treated for that alone. In another part of this booklet the cure will be found for it.

SEPTEMBER

The spring cabbages which you sowed in July and at the beginning of August should be planted out now. Dig up all your old pea vines and vegetables that have finished cropping. Dig the soil over thoroughly and give it a dressing of lime. When you plant out your spring cabbages or red pickling cabbage see that the soil has plenty of lime. Continue to earth up your leeks and also your celery. Towards the end of the month lift up your main crop of potatoes, and incidentally do not put them away in sacks or boxes with earth on them. See that they are quite clean. Take off any surplus leaves from your Brussels sprouts. Thin out turnips and parsnips. Parsnips are not really ready for the table until they have had a good frost, and you thin them out in order to get large roots. If you have an early frost lift up your carrot crops and store them away for the winter. Lift up a root of parsley and pot it in a large pot or a box, and take it into the basement. This will ensure a winter supply of this very useful herb.

Gather your runner beans every day, as from now on they are apt to get coarse. You can keep a few on the vines for next year's seed.

Remove and burn any fruit trees that have got too badly diseased to cure, or have not borne for many seasons. Mulch all other fruit, both large and small.

Start going over your rockery, thoroughly cutting back many of the prostrate plants, also others. Give the soil a good dressing of fine leaf mold or very well rotted manure wherever possible. At the end of the month plant any new bulbs that you decide to get for early spring flowering, such as miniature daffodils, anemones, muscaria and crocus, or rock tulips.

Put your violets in frames now in order to get winter blooms. Or if you have a spot in the south by a wall you can put in a bed that will bloom very early.

Cut down all old flower stems of your perennials, and when your annuals have finished flowering take them out and get the space they took up ready for planting your spring bulbs. This can be done at the end of the month. Divide up any clumps of the larger perennials and replant them at once.

As the leaves start to fall, rake them up and put them on your compost heap, or in a heap by themselves, and keep on covering them up with a slight covering of earth.

Continue to mow the lawn as often as possible and as late as possible, but put the lawn cuttings around your fruit trees and flowering shrubs. This is an ideal winter mulch.

Take the hose in for the winter, but be sure to see that there is no water left in it. Hang it up in the basement or tool shed. Be sure and see that it is not too near the furnace or in any spot where it will get heat, as this will help perish the rubber.

OCTOBER

Start cleaning up the vegetable garden by taking out all plants that have finished cropping. Go around your Brussels sprouts and see that they are not falling over. If they are, stake them up, as this will prevent them from lying on the ground when the snow comes and the small sprouts from getting spoilt. Towards the end of the month lift your carrots and either sack them or store them in the place you usually do. Continue to earth up leeks and celery. Cultivate well around the spring cabbages you planted out last month and give them a slight dressing of lime. If you want to force some early rhubarb lift one or two roots and leave them outside for a little while. Then replant them in a cold frame or cover them with manure. Plant out new small fruit bushes and see that your raspberry canes are all fixed up for the winter. If you have an asparagus bed, cut off all the foliage down to the ground and give the bed a good dressing of well rotted manure, but before you do so be sure to see that there are no weeds growing. Dig over all vacant ground and lime the soil, except that part you want for potatoes.

Lift any late crop of potatoes and put them in storage. Gather up any rubbish that may be around, and if not suitable for the compost pile burn it and work the ashes into the soil.

Keep on tidying up the rockery, and wherever possible give a dressing of finely sifted soil, leaf mold for preference, or well rotted manure. Put a little peat around the heaths, azaleas, daphnes and dwarf rhododendrons. See that the stones are in good shape and have not become loosened, so that they will not get riven up with any frost. Cover lithospermum, lewisia and androsaces with a piece of glass, or failing that, lots of bracken. These things hate the wet. Continue to plant rockery bulbs.

Take down and put on your compost pile your sweet pea vines, and

finish taking out any annuals that may be in the bed you want your bulbs in. Plant out wallflowers and any new perennials in their permanent beds. Plant all bulbs towards the end of the month.

Give your lawn a final mowing and a dressing of leaf mold, finely sifted, and fresh water sand. Wash the mower well and then go over it thoroughly and oil every part. Then wipe the whole with a very oily rag. Put it away for the winter.

At the beginning of the month start taking in your indoor chrysanthemums, and continue doing so all through the month, depending on the variety and the time they are due to bloom. Start feeding these directly buds begin to show any sign of color. Disbud as buds appear according to what size or number of blooms you want.

NOVEMBER

Continue to tidy up and remove any debris that may be around. Cultivate well around all cabbages. Give all small fruits a good winter mulching of well rotted manure. Turn in any weeds that may appear. Rake all leaves off the ground and keep in a heap until you are ready to put them on your compost pile. Lift any beets, carrots or turnips that may be left in the ground. Continue to dig over any vacant ground.

As many people usually have their sweet peas in or very near their vegetable gardens, you should start digging your sweet pea trench now. Dig it as deep as you can, and this will give you a place to throw a lot of vegetation and old sods into.

At the first sign of frost you may find that some of your primulas, gentians and encrusted saxifrages have become lifted up with it. Go around and press all these plants down firmly with your foot. Remove any leaves that may be in the pool, and if you think it is going to be very cold and your pool is going to practically freeze up, put a large block of wood in the middle of it. This will prevent the concrete from being damaged by the frost.

Tie up the rock daphne so that if there is any snow during the winter it will not get in the centre of the bush and split it.

Lift up dahlias and salvia patens. Shake all earth off the tubers and put them in a cool dry place, but away from frost.

Go around and cut down all dead stems of perennials, and lift all annuals from the ground. They will only make a mess and look untidy.

See that the net you have used for your sweet peas, and also the poles for your runner beans, are put away safely until the spring, when they will be needed. See that the cold frames that are not being used are in good shape and take the lights inside so that they will not get broken.

Prune your peach tree and tie up any straggling shoots of your climbing roses.

Take in the balance of your indoor chrysanthemums and start feeding in earnest those that are of the late variety.

Keep an eye on your violet beds, both in the frames and outside. Remove any decayed leaves and runners, and with a handfork cultivate the soil a little.

DECEMBER

Continue to keep on tidying up and digging whenever the weather is suitable. Protect the celery bed if the weather is very bad by covering it up with bracken.

Your root crops that have been stored should be gone over from time to time to see whether any have decayed. If so these should be removed immediately, as they will spoil the rest of your crop.

At this time of the year the demand for manure is not so large, and you should get in a supply now. Stack it neatly in some place and cover it up with boards placed in a sloping position so that they will shed the rain, or failing this, some tar paper. This will be well rotted by the spring when you want to use it.

Continue to give your fruit trees a good winter mulch, and root prune any that you think should be treated in this manner.

Go around from time to time and see that none of your climbers, such as ivy and other things growing up the side of the house, have been hurt by any strong winds or violent storms. If you find any branches that have been torn away, nail them up again as soon as you can.

Go around your evergreen shrubs and see that none of the dead or dying branches are left on.

Pack bracken in the fork of your standard roses and cover up the stems with earth, and pack plenty of bracken around the bush roses. This is a preventive for the heavy frosts that may possibly come in the early part of the year.

It is during this month that one gets many new house plants given them. Remember, however, that many of these have come from a warm greenhouse with an equitable temperature, and then taken from that to a very warm store, and then taken outside in the cold. You must look after these when you first get them and give them plenty of good food.

Bring out at the beginning of the month any bulbs that you may have put down for forcing so that if possible you will be able to get bloom for Christmas. At the beginning of the month start putting down lily of the valley for winter blooming.

Finally, make a point of giving plants to less fortunate friends for a Christmas present.

Making A Garden

No matter whether you are living in an old house or are just going into a new one, the question of a garden is very important, and it is not just a question of saying to yourself "Here's a piece of land. Let's grow something on it." Your garden is your outdoor living-room, and requires just as much thought as the rooms in your house. You wouldn't say "Here's a room. Let's shove some furniture in it," and let it go at that. No, you want to make it as attractive as possible.

No matter whether it is a 33, 50 or a 100-foot lot, or even much larger, it requires a certain amount of thought, and perhaps the smaller a garden is the more you want to plan it, so that you can get the most out of it.

The first thing you want to do is to make up your mind to get away from straight lines, and also get as much in it, without its being crowded, as possible. You must have a lawn, that carpet of your outdoor living-room, where you can sit and enjoy yourself; and, of course, more especially in these days where conservation is so sorely needed, a vegetable garden.

Many people wonder how on earth this is going to be brought about. The answer is very simple, really. All you have to do is to cut your coat according to your cloth.

But the first principle to be followed is to avoid straight lines and to break up your garden as much as possible, as this will give it a larger appearance. Then the second thing to do is to divide your vegetable garden from your flower garden. This is very simply done, by either trellis work or a pergola up which roses can grow.

This dividing line needs a certain amount of thought. You do not want to just put it there with an opening in the middle and leave it at that. You should have an opening on one side, and if possible have the line on a slant. This will make the area appear larger.

The vegetable garden does not need any planning to speak of, and you must plant your crops in straight lines, but it is the flower garden or the outdoor living-room that requires thinking about.

As your garden is really a frame for the house, the most essential thing to start with is a background. On a small lot this is not always easy, but you must have a fairly high hedge or fence around it, against which you grow tall perennial plants.

But before you think about planting anything, the design is the first consideration, and the most essential thing to have is a lawn, as this is the carpet of your outdoor room, and no matter how small a room may be it always has a carpet or at least a rug on the floor. This of course should be in the centre of the garden, and around which are the various beds. But these beds should be made with curving edges and not straight ones, and if you have a path running through it, as you are bound to, do not make this path straight. Make it winding.

Then around the fence or evergreen hedge have flowering shrubs planted, fairly high ones if possible. Then start off with tall perennial plants so that on two sides at least you will have a perennial border, and however small the garden may be you will have an alley of flowers on each side of your lawn.

These plants should grade down to the very lowest, but at the same time you must not have these beds too crowded because you will want to have annuals as well as bulbs growing in them.

But speaking of bulbs, you can have one bed of these, preferably at the end of the flower garden, so that when they are over you can plant annuals and thus have a blaze of color during the summer as well as provide flowers for decorative purposes.

Everyone wants to have some roses, so that is why in a small garden you should have them growing up a pergola or trellis work between the two gardens, but it is nice to have some low bushes as well. These can be put in small beds on the edge of the lawn, and if you want to have a standard rose or two you can make a small bed for them either on or near the lawn.

If it is at all possible you should arrange to have a small arbor, and a very good place for this in a small garden is at the opening of the division between the two gardens.

No matter whether your main garden is in the front or back of the house, you should always make the boulevard in front of the house attractive. This is very easily done by the means of a strip of lawn on which are planted flowering shrubs or evergreens. There are many of the latter which not only look nice but are very inexpensive to buy.

Another thing that is more or less essential to finish off a garden is a rockery and pool. So many people seem to think that they must have a large garden to have these, but however small a garden it may be there is always a little room for one. True, it may not be as big as you would like it, but it can be made to conform with the rest of the garden. And in this regard this applies to all gardens—the larger the space the larger the lawns, rockeries, pools and beds.

It is very hard to lay down any specified rules on how to lay out a garden, other than the above general principles. As I have already said a garden is your outdoor living-room, and as your personality is brought into the arrangement of your indoor rooms, so it will be in your garden. Everyone has their own ideas, but despite this there are certain rules that must be given. And the above remarks are given to help you. The question of flowers and plants is left entirely to your own choice, which is as it should be, because you would not follow any special rules as to the pattern of the carpet or wallpaper you wanted.

Making A Lawn

The lawn or carpet in your outdoor living-room can only be one color, green. The shape does not matter so much, but in order to have a good one there are certain rules that must be followed.

When you have decided on where your lawn is going to be the next thing is to make one. This is not such a difficult task as one is given to think. All that is needed is a little hard work and the using of common sense.

The first thing to do is to dig up the site thoroughly—and it is not necessary to plant potatoes on the site first. True it is that this helps eradicate weeds to a certain extent. After you have dug the site over thoroughly you should then screen the soil systematically. This means that you take a piece at a time and screen it. Continue doing this until you have a whole series of heaps of soil all over the lawn. Throw away all the stones and rubble that have not gone through the screen. Then

with a hoe spread the soil out as level as you can. Then rake it over, at the same time removing any small stones that may have got through the screen. When you have done this get a piece of six by four and make a tamper. This is using a piece of lumber of the foregoing measurements and putting a handle in it and use to tamp the ground down. You will find that this will make the ground quite level, and if you have a roller so much the better, but rollers are a bit on the expensive side, and you may not be able to get one at first. Then when you think you have tamped the ground down well and hard and you are not satisfied with the quality of the soil get a load of good soil, sift it thoroughly and spread this over the top.

Tamp this down thoroughly and leave it for a while. If any weeds appear take them out with a hoe or rake as fast as they come up. After the lawn has thoroughly settled go over it again with your tamper and take out any uneven spots, and it is ready for sowing.

The quantity of seed to use on a new lawn is one pound to eighty square feet. The way to do this is to mark off the lawn in sections, using pegs and string for the purpose so that you have eighty square feet in each section, then sow your seed. This is done by first raking each section one way, then sowing the seed and raking the section you have put the seed in in the opposite direction.

After you have completed the sowing give the whole lawn a sprinkling of finely sifted soil and use your tamper or roller once more. Then keep the whole thing damp for a few days and never let it get very dry until the grass appears.

As to the best time to sow a lawn, it is a matter of choice and circumstances, but the early spring is usually the time, because the grass can get a good start before the winter.

On the other hand, if you wait until the early fall there will be less chance of any weeds getting into it, as you will hoe these out during the summer as they appear.

CARE OF A LAWN

Once your lawn is established it must be looked after as is the carpet in your house. This looking after is constant raking with a bamboo rake, and mowing. It should be given a dressing of lawn food in the fall, and in the spring a dressing of finely sifted soil, sand, and a little lime.

If you find moss appearing in it, it is a sign that the soil has become acid and wants sweetening. All you have to do is to rake out the moss with an iron rake and put plenty of lime on the affected areas with a little good soil, and if you have had to take a lot of moss out you will have to sow some more seed. You will find that in nine cases out of ten moss always appears underneath the trees. This is due to excessive moisture, and in spots like this you should use creeping bent when repairing these mossy patches.

No mention has been made of the seed to be used, but this depends to a certain extent on the locality you live in. It is advisable therefore to consult your seedsman as to the best mixture to use, and as he lives in your locality he will be only too pleased to advise you what to use. He wants you to be satisfied and have a good lawn, because it is the best advertisement he can have.

How To Make A Pool

When you are making a new garden or making over an old one you should, if possible, arrange to have a pool in it. Somehow or other a pool is a very attractive thing; not only does it give a garden a finished appearance, but it also provides a lot of entertainment, as the birds use it to have their matutinal bath. And their antics and performances are better than any movie show.

Many people seem to think that a pool is a very hard and expensive thing to make. Nothing of the sort. All that is required is a little healthy exercise in the way of digging, a sack or even two of cement, some fresh water coarse sand, and a few small stones.

Before you start to dig the hole for the pool you want to mark it out. And in this regard you should, if possible, avoid making a square one or even a round one. Make one irregular in shape.

Having decided on that shape, the next thing to do is to start digging. And this need not be done all at once, but during the winter months. It does not matter if you do not get it completely finished before the frost comes. You can wait until the frost is over.

The most important thing to remember is that it must be very shallow at one end, and having dug the required depth, which is about two feet to a few inches, the first thing to do is to get a lot of small stones and put them at the bottom of the pool. Then when you have done this get the hose and give them a very good washing. Do not be afraid of this. Then mix up your concrete, using five parts of coarse sand to one of cement, but mix it thoroughly both before you put the water in and afterwards.

Then pour this mixture over the stones and spread it evenly with a trowel. The question of the sides may worry you a bit, but if you do not want them too steep you will have no difficulty with them, but if you want them steep, at one end at any rate, you will have to make a bit of a form with lumber. This is very easy and it is not necessary to tell you how. If you do not know how to go on, just have a look at any building that is going up in your neighborhood.

Then, having put the concrete all over your pool, let it dry thoroughly, but whatever you do, do not let it dry too quickly. Whilst it is drying get some good sized rocks or stones and put them around the edges, setting them in the wet concrete so that they will stay there. This gives a pool an attractive appearance and prevents any hard or stiff lines. Over these rocks you can grow many things which will sort of frame the pool itself. This will be dealt with a little later.

After the cement work is fairly dry mix up some more cement in a mixture a little thicker than you would make kalsomine and add a little of the waterproofing mixture that is sold for the purpose, and with a brush paint all the concrete you have done. Then leave it for a day or two until it is thoroughly dry. By this time you can fill the pool, and you will see whether it leaks or not. If it does, give it another good coating of the cement and waterproofing mixture. Then when it is leakproof let the water stay in it for about a week, and after that time siphon it out. Then fill it again.

Before you fill it the second time put in some small tubs at the bottom, so that you can plant lilies in them. These should be set into the concrete

so that they will not float, and filled with leaf mold and good soil in which you plant your lilies.

Now, with regard to what to plant around the edge of the pool, the first thing to get is a fairly high border of iris and spirea. These do well where there is water, and make an attractive setting for the pool itself. Then over the stones you can plant thymes, sedums and other low growing plants, and between the rocks and the iris, primulas, trolius and forget-me-nots for spring flowering, and then fill in any other spaces with gay annuals. By following this procedure you will have a mass of color all the year 'round.

It is not always possible, but the ideal spot for a pool is at the foot of a rockery, with a small waterfall trickling over the rocks into it. This does run into an expense, but if you do have a rockery try and make your pool at the foot of it.

But unfortunately some people have only a small lot, such as a 33-foot one, and are apt to say they have not room for a pool. This is wrong, because you can do so by sinking a small tub into the ground and building up rocks around one side of it and covering the other side up with soil so that the edge of the tub cannot be seen. Between these rocks you can plant many things, both creeping and fairly tall, so that you will get the same effect in miniature as you would with a large pool. Around the edge, where there are no rocks, you want to plant some of the low growing primulas, such as Wanda and Julae. These bloom for practically nine months of the year, and also some of the better sedums, which will give you bloom from August until the frost comes.

I have made no mention of fish, which thrive exceedingly well in any pool, but they must not be put in any pool until it has been filled for the second time. The lime that comes out in the concrete will kill them, otherwise. Once a pool is well established and has plenty of lilies and other aquatic plants in it, it is not necessary to feed the fish.

They will get plenty of food from the plant life that is in there. Further, fish, and of course I am referring to goldfish, keep down mosquitoes. If you get trout and put them in, you must not put them in with the goldfish, otherwise soon there will be no goldfish, more particularly if they are small ones. If your pool is fairly big, or even if it is just an average size, you should try to buy breeders when you are getting your supply of fish for it. By so doing you will increase your stock very quickly and in a very short while you will have a surplus, which you can either sell or, better still, give away to less fortunate friends.

**Save by Growing Vegetables
and
Buy War Savings Stamps**

PESTS

Although a garden can give a lot of pleasure and food, it can also cause a lot of grief, owing to pests and disease which affect the various things that grow, and unless these are controlled in their early stages all your work will have been of no avail. But like all evil things they are more or less easily controlled if taken in time.

The following are a few of the most common pests and diseases that are found in the average small garden:

Aphids, or plant lice. Controlled by spraying with nicotine sulphate and soapy water. Use 1½ teaspoonful nicotine sulphate, 1 ounce soap and a gallon of water.

Flea beetles, which affect potatoes, tomatoes, turnips and other root crops. Quick jumping little insects, black and blue colored, which eat small holes in the foliage. Spray with derris dust and gypsum or flour. Using one part of derris dust (5% Rotenone) and six parts of gypsum or flour. In the case of potatoes, use Bordeaux mixture.

Cabbage maggot, sometimes called the cutworm. Use half a cupful of corrosive sublimate solution to each plant when planting out young seedlings. Do this when first put in and again in about ten days.

Carrot fly, also turnip fly. Water around each row with corrosive sublimate solution, and also scatter lawn mowings between rows and sprinkle with coal oil. Delay seeding as late as possible.

Wireworms. These are killed by kindness. Get some linseed oil cake, such as given for cattle, and break it up in small pieces and bury just underneath the soil every few feet. You can also trap these by burying an old potato just underneath the soil and lifting it every few days.

Greenfly attacks roses, more particularly. Spray with a good insecticide advertised for the purpose or with nicotine sulphate and soapy water.

Black fly. Particularly addicted to broad beans. Nip the tops of the plant when it is full grown and spray well with nicotine sulphate and soapy water.

Thrips. Attack gladiolus. Spray the foliage as soon as it appears with a weak solution of Bordeaux mixture, but if found later on, spray with the following solution: One rounded tablespoonful of paris green, two pounds brown sugar and three gallons of water. A 1-200 solution of pyrethrum is also effective.

The rose curculio, sometimes called a bud borer, is a snout nosed beetle, and is controlled by dusting with nine parts fine sulphur and one part of arsenate of lead.

The leaf hopper, which also attacks roses chiefly, is controlled by spraying with nicotine sulphate and soapy water.

Most of the pests are divided into two classes, chewing and sucking insects. For chewing insects you want to use a stomach poison such as arsenate of lead, and for sucking insects nicotine sulphate and soapy water. The arsenate of lead can be applied in powder form or in solution.

DISEASES

There are a few diseases which unfortunately are more or less prevalent in British Columbia, amongst which are the following:

Club root. Affects cabbages. This only does well in an acid soil, so a liberal application of lime will prevent it. If it is found, watering around the affected plants with a solution of corrosive sublimate will stop it. This is a knobby swelling of the roots, and the plants wilt in dry weather and never recover.

Mildew. Affects garden and sweet peas, many of the perennials, roses and lupins. At the first sign of it, dust well with fine flowers of sulphur, making sure that it is sprayed well underneath the leaves. The best time to do this is in the evening. Keep plants well apart and free from weeds.

Rust. Affects snapdragons, hollyhocks, violas and pansies. Clear all weeds away from plants and dust well with fine flowers of sulphur as advised in the case of mildew.

Wilting or dampening off. This affects seedlings and is a fungus in the soil. The use of wilt-resistant seeds is advocated, and also thorough sterilization of the soil before seed is sown.

Black Spot. Probably the most destructive of all rose diseases. Directly it is seen the leaves should be picked off and burnt, and in the fall all leaves at the base of the plant should be gathered up and burnt. Spraying with Bordeaux mixture when the leaves first appear will do a lot to control it, and a further dusting with Massey dust (one part arsenate of lead and nine parts of dusting sulphur) will prevent it spreading when once it is seen. This can also be used as a preventive. There are, however, many fungicides on the market which will help to control this terrible disease. It can also attack other plants and trees, such as lilacs, and some of the flowering shrubs.

Botrytis blight. This is a fungus that attacks a great many plants, and is particularly destructive to paeonies. It is first noticed by a small brownish mold over the stems of the plants which soon spreads to the leaves, and the plants wither and die. The best way to control it is to remove all debris from the base of the plant and burn it. Disinfect the soil as much as you can and spray the plant with Bordeaux mixture.

RECIPES FOR CONTROL OF PESTS

Bordeaux mixture. One of the most useful sprays for any garden. Dissolve two ounces of copper sulphate in one gallon of water, but be sure to use a wooden or earthenware container. In another similar container dissolve two ounces of hydrated lime in two gallons of water. Then pour the lime water into the copper sulphate solution, stirring constantly. The result will be a sky blue solution. If you want to control sucking insects add one tablespoonful of nicotine sulphate. For chewing insects add one ounce of arsenate of lead.

If you want to use this mixture in a weaker state add half a gallon of water.

Corrosive sublimate solution. Dissolve one ounce of corrosive sublimate in ten gallons of water. As this loses its strength if it is mixed in a metal container a wooden, earthenware or glass container must only be used. It is a deadly poison, taken internally, so great care must be taken to keep it off the hands.

Nicotine sulphate solution. One and a half teaspoonfuls of nicotine sulphate, one ounce of soft soap and one gallon of water. Make the water as soapy as possible before adding the nicotine sulphate.

Lead arsenate solution. Dissolve three and a half teaspoonfuls of powder lead arsenate in one gallon of water. If you want a larger quantity use the foregoing proportions.

To make nicotine sulphate, if cannot be obtained locally. Get two plugs of strong smoking tobacco. Cut them up in small pieces about an inch square. Place them in an old four-pound jam tin and cover them with water. Then put the tin on the side of the stove and let simmer for about three days. Do not let it boil. Then allow to cool and strain off into a milk bottle, and afterwards into a smaller bottle or bottles. Cork and put away for future use. This should give you nearly a year's supply.

Poison bran mash. For earwigs and cutworms. Five pounds of bran, four ounces of white arsenic or paris green. Mix well together. Then grind up two oranges or lemons and add to a quart of water that has been sweetened with a pint of very cheap molasses. Pour the liquid into the bran mixture, stirring until it is crumbly. If this is not sufficient, add a little more water. Do not make it pasty. When it is ready spread it out at night, but take care that domestic animals and birds cannot get at it.

To get rid of ants. When the ants are in the house in places such as cupboards or around the verandah, place small heaps of icing sugar and powdered borax in equal proportions. This will eliminate them entirely.

To get rid of ants' nest outside, such as a lawn or flower bed. Make a few holes in the top of the nest and pour a teaspoonful of carbon bisulphide in each hole so made, and cover the whole up with a wet sack for a day or two.

To get rid of moles. They are very hard to trap, and the easiest way to get rid of them is to use a teaspoonful of carbon bisulphide in their runs and stop up their holes after so doing with a sod. Naphthalene flakes will tend to keep them away but will not destroy them. Spent carbide from a bicycle lamp will also act as a preventive.

How To Build A Rockery

No matter how big or small your garden may be, a rockery is one of the most attractive things you can have in it, and it is not a very difficult thing to make. All that is required is a little imagination and hard work.

First of all, a rockery is really supposed to represent a condition that exists in nature, more particularly in the mountains and foothills, so the first important thing to decide upon is where you are going to have it, or in other words the site. This should, and must, be in a sunny spot facing south, and also, if possible, having a background of trees or tall shrubs.

Having decided on your site, the next thing to do is to make up your mind on the size you want to have it, and then start work. The first thing you do is to get a lot of rubble and stones and sandy soil and pile them all up in a heap. Then mark out your outline. In this connection, you must at all costs avoid straight lines, but have it very irregular at the base, with plenty of small bays. The next procedure is to get some very good soil and put it on top of the pile of stones. Get plenty of it and as you get towards the top mix some good leaf mold with it.

Now you are ready to go ahead with the actual construction of your rockery. The most important thing, of course, is to see that you have a good supply of rocks, and do not be afraid of getting large ones, and the bottom ones should be as large as you can possibly get. Put these large stones at the bottom, conforming with your outline, and when they are all in place, start to draw the soil towards them. But, as you put them in place, dig out a shallow place for them to fit in, so that they will not slip or roll out of place. This is very important, especially when you live in a place where you are apt to get very heavy frosts in the winter. As you draw the soil to the back of them, see that it goes down well behind and forms small pockets or beds. Having done this, start with your second tier. These must not be put directly behind the others, but placed in between the spot where they meet. This will prevent the soil running down the crevices or cracks between the stones. And if by any chance you see that the soil is liable to do this, fill in with smaller stones at the bottom of the crevices or cracks.

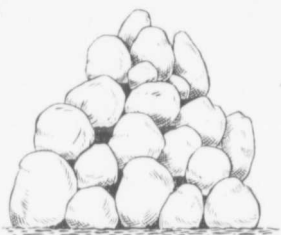
Another thing that you must remember is that you must vary the size and shape of your stones. As an example, some plants like a flat stone to grow over, whilst others like a smooth, sloping stone to grow on. On the other hand, steep-faced ones are very good for other plants, and this lack of uniformity of stones or rocks makes a very attractive rockery, whereas if all the stones are the same, or the same size, it makes it look artificial and dull.

Further, do not be afraid to put one or two big stones or rocks at the top, and do not grade them, such as having the large rocks at the bottom, then a little smaller, then smaller still, and so on. This is wrong, and looks artificial also.

The reason you put all the rubble and stones at the bottom of your pile when you first start is to ensure good drainage, and the question of moisture and drainage is very important. You will find that the large rocks will conserve the moisture throughout the hottest days, but that the roots of the plants should be kept cool and moist is important. For this reason, if possible, you should have a water pipe running up in the



WRONG. — JUST A PILE OF
EARTH AND STONES.

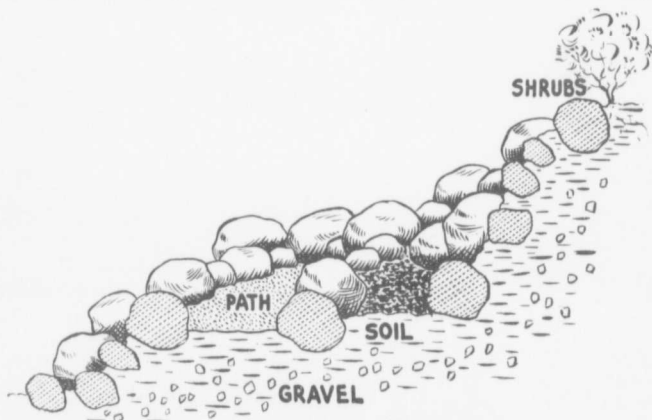


WRONG WAY TO BUILD A ROCKERY.
TOO MANY STONES, NOT ENOUGH SOIL.

centre to the top of the rockery so that you can turn it on for a while and the water will run down through the rockery.

One very important thing to remember is that the rockery is usually at the edge of a lawn, and for this reason you should cut the lawn back about six to eight inches so that the grass will not grow into it, because once that happens, no matter how careful you may be, it will spread, and in order to get it out you will have to remove your rocks, which is a hard job, to say nothing of disturbing many of the plants that you have taken a lot of time and trouble to grow.

As you build your rockery up, you must have plenty of pockets of small flat beds, and at the same time have one or two overhanging rocks, where you can put plants that like to be protected from the moisture. And as you build, you must be sure to put your rocks so that they slope



A WELL BUILT ROCKERY — SHOWING
POCKETS OF EARTH AND PATH OR
STEPPING STONE IN CENTRE.

inward and downward. You will find that they will stand ever so much more firmly if this is done, in fact it must be done, otherwise you will have a lot of trouble with them falling out of place.

The next important step is the planting of what you want to put in your rockery. This is a bit of a problem, but as the object of a rock garden is to have a blaze of color in the early spring, it is not a very difficult one at first. And the first place to start this job is at the base.

There are many things that you can plant at the base, all of which are easy to get and very cheap. One of the best things to use is thrift, or, as it is sometimes known as, sea pink. These are very compact growing things and are easily kept cut back. In the crevices you can put many of the sempervivums, sometimes called house-leeks, and if you want to have an edging all the way around you can use *acaena*. This however, is a great spreader and must be kept under control. Then, some of the earliest flowering and easiest to grow plants are the small primulas. There are so many of these that space does not permit a more detailed list of them.

The next important step is to put in plants that will cover your rocks. There are many of these, such as *arabis*, *aubretia*, *phlox* and *thyme*. All of these should be planted with the roots up against the rocks and the soil well banked on to the roots. These will all grow downwards and very quickly cover the rocks with a blaze of color in the early spring. There are many varieties and colors of these, and it is purely a matter of taking your choice. In the *phloxes* there are one or two outstanding varieties, such as *vivid*, the *bride*, and of course one of the latest *camella*. This is a very large one and continues blooming much longer than the others.

The *aubretias* also come in many colors, but the new double variety is very attractive. Another attractive and quick growing plant to put on top of a rock is *androsace*. This grows very rapidly, and once it is established is easily moved from one place to another.

Then there are the flat beds or pockets to be filled in. This is largely a matter of choice, but the encrusted *saxifrages* must not be forgotten. However, when you plant these, cover the small bed up with fine stones, such as *torpedo* or *chipped granite*. This will keep the roots cool and they will do much better. And also, in the same sort of places, and with the layer of stones, you can put some of the rarer *sempervivums*.

But in various parts of the rockery it is more than advisable to plant some very low growing or dwarf shrubs, some of which should be of the flowering variety. These must include the *daphnes*, rock *azaleas*, and dwarf *rhododendrons*. These break the flat outline of the rockery.

The next question to consider is that of the background. It is not always possible to have one of trees, so, for this reason, you should put right on top such things as the dwarf Japanese maple and other fairly dwarf evergreens.

As there are well over 5000 varieties of alpine and rock plants it is impossible to tell you what to plant, but the following are the best to begin with. *Alyssum*, *androsace* or rock *jasmine*, *aubretia*, *arenaria montana*, *campanula* (many varieties), *dianthus* (many kinds, including *dianthus alpinus*), *gypsophila repens* (an ideal creeping plant), all the rock roses, perennial *candytuft* (both the pink and white), the *phloxes*, some of the commoner *gentians* (including, of course, *gentian acaulis*, *lithospermum* or heavenly blue), both the mossy and encrusted *saxifrages*

(there are a very large number of varieties of these), the veronics and the *lychnis alpinus*. All these are very hardy and are ideal for a beginner.

There is another thing that has not been mentioned, and that is bulbs for the rockery. The more common ones, such as the crocus, snowdrops and muscaria, are ideal for putting at the foot, as they come up so early.

The muscaria, however, can be put in and about the rockery, as they are also very early.

The other rarer kinds are the dwarf daffodils, such as narcissus *mini-mus*, the hooped petticoat, and the *kaufmannii* tulips. These are not usually found in the majority of rockeries, but are very attractive.

As you go on you will find lots of things to put in, and as you visit other gardens you will see what plants you like. There is one important thing you must remember, and that is when you get a new plant you must find out what sort of a position it likes and what kind of soil. You will find that some plants like lime, whilst others cannot stand it.

No mention has been made so far of one of the most essential things for this form of gardening, and that is the heaths or heathers. It is possible to have a whole rockery comprised of nothing else to speak of except these. Incidentally, some of these are ideal for putting on top with the other dwarf shrubs, and more particularly as by mixing up your varieties you can have bloom all the year round.

A very important thing that must be done in the late fall to a rock garden or a rockery is to be sure to give it a good top dressing of leaves or leaf-mold, or, failing that, some very well rotted manure or old mushroom beds. And also you will learn what particular plants hate the wet and melting snow. These must be covered up with old bracken, or if you have it, some old window glass, and in this class are the *lithospermum*, *androsace*, *lewisias* and the rarer alpine *primulas*.

Then you must go around all your flowering shrubs such as the daphnes, azaleas and rhododendrons and put some old bracken in the crotch of these. The reason for this is that it prevents the snow getting to this spot and splitting them. Many valuable plants are lost for this reason.

Perhaps there is no phase of gardening as fascinating as this one is, and the longer you keep at it the more enthusiastic you will become, and consequently the more and more varieties you will get, and for this reason one of the first things to remember is to be generous with your plants. You will find that they will grow and you will have to keep them under control. Do not throw them away, but give them to someone who has not got any of that particular variety. They will probably give you something in return, or remember you when they have something you have not got and want. In a nutshell, be generous with your plants and you will have a successful rock garden.

Incidentally, many alpine and rock plants can be raised from seed, so when you are looking through seed catalogues you should always keep your eye open for anything that you might want and can be grown from seed. In this class, true alpine such as the blue poppy (*mecanopsis*) *lewisias*, the alpine *primulas* and *lychnis alpinus* are more than easy to grow in this manner. The whole point to remember in this regard is that the more snow and frost they get the better they will germinate.

Once you have established your rock garden or rockery you will find that it is a thing of beauty and a joy forever.

SEED SOWING IS EASIEST METHOD OF PROPAGATION

(Reprinted from Vancouver Sun)

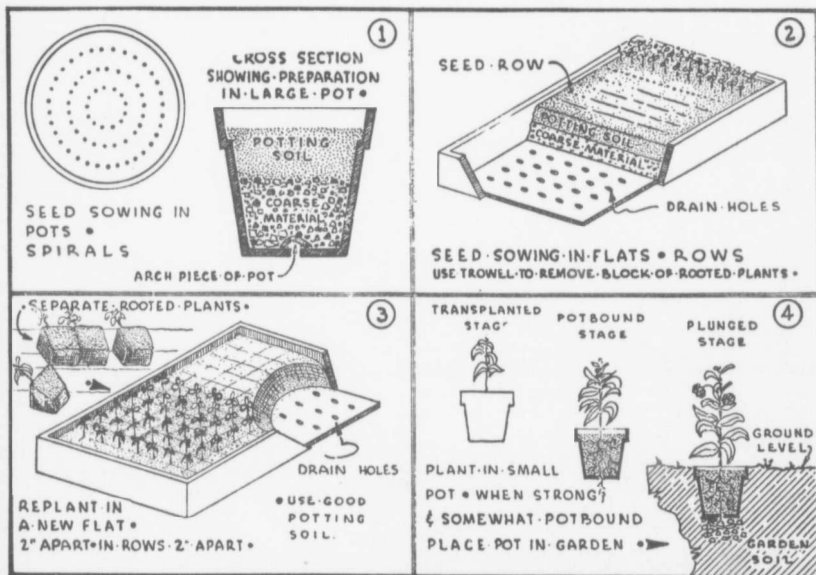
Most plants are raised from seed in spite of the many other methods of propagation. There is no other way of increasing one's stock so easily.

Because most seeds endure a long period of dormancy they can be stored and used as wanted. Propagation by cuttings and other vegetative methods are controlled by the seasons.

Few seeds have 100% germination chances. In planting it is always best to allow enough extra seed to cover the failure of a certain percentage to sprout.

Moisture and darkness is required by seeds for sprouting and ordinary soil provides the easiest method of supplying both. A point to remember is that very fine and small seeds must never be sown with more than a thin layer of soil over them.

A good plan is to have the covering layer of finely pulverized soil. Scatter the seed, rake in gently, and tamp the soil with a board to hold them firmly so that they will germinate.



Here are shown methods of seed sowing and propagation in pots and flats.

It is a good rule to plant seeds two to three times as deep as their size, whether in rows or sown broadcast. Plant somewhat deeper in sandy soils, as these are drier and will require more moisture. Germination of generally handled seeds is in a few weeks, but in some cases it is much longer.

* * *

While many seeds can be sown where wanted, there are others that must be transplanted several times before being put into their final location.

Chief among these are the following: *Ageratum*, African daisy, China aster, Swan River daisy, cosmos, Cape marigold, *godetia*, strawflower, balsam, marigolds, zinnia, *nemesia*, Drummond's phlox, *petunia*, *salpiglossis*, *salvia*, *schizanthus*, snapdragon, blue lace flower, four o'clock, *scabiosa*, *venidium*, *verbena*, and Madagascar periwinkle.

Vegetable plants such as tomatoes, peppers, the cabbage tribe, celery, cauliflower, eggplant, asparagus and rhubarb must also be transplanted. Most garden perennials, greenhouse plants, trees and shrubs improve if they are sown in a specially prepared seedbed and later transplanted.

* * *

Seeds being shallowly planted are likely to dry out and must be watered with a gentle fine spray, preferably in the late afternoon.

While moisture is a prime necessity, it is not advisable to keep up a steady watering. You can avoid this and still keep seed flats or pots moist by shading them with lath screens, cheesecloth or paper. A sheet of painted or ground glass can be used on small flats or pots.

Take care that too much moisture does not accumulate, raise the covering during heat of day to permit passage of air. A grouping of flats and pots in cold frame permit simple use of a large screen.

As soon as the seedling makes its second leaf, it should be transplanted or pricked off. Use a pointed stick, as plants are too small to handle.

Transfer each seedling to the flat individually, plant about one inch apart, and gently press each in place. When these touch each other, in a week or two, they are ready for transplanting into pots or into permanent quarters.

Water pricked-off seedlings very gently with a fine spray.

After the seedlings have been planted, they should be given a good watering and should be shaded from the direct sunlight for a few days. Having recovered from their slight shock, they must be allowed plenty of air and light.

Pinch the seedlings back to encourage better roots and stockier top growth. Do not allow them to remain in flats or pots too long, as plants become leggy and weak.

GARDEN HINTS

A very good way of keeping the roots of your plants moist in the very dry weather, and where there is a limited water supply is to put empty jam tins in and around your plants. Before you do so, punch a few holes in the bottom of them with a nail or some such thing. Bury them so that the top is just level with the soil and keep them filled with water. You will find that some of the soil will get in to the bottom and the water will seep very slowly through the holes you have made. This is a very good way of conserving water and the roots of your plants will always be damp.

When using the hose on the perennial or other border, never water from above, always water the roots. There are very few exceptions to this rule, but on no account or under any circumstances should sweet peas be watered with a spray. If you do they are apt to be very subject to mildew. This can practically kill a whole row in a very short while.

One of the most important things to have in your garden is a compost pile. This should be in a box without a bottom, and if you want it to rot quickly, the application of a few handfuls of calcium cyanamide every six to eight inches, together with a little fine soil, will help in this regard.

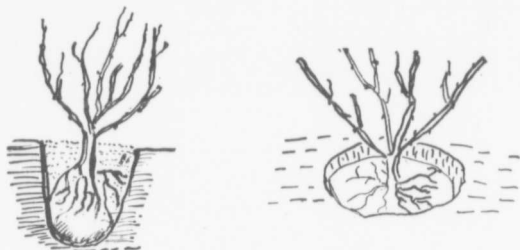
If you have a piece of land you cannot use at the present time, this should be well dug over and planted fairly late in the season with rye, clover or some such cover crop. Then in the late fall dig this well in. This improves the soil and is called using green manure.

Very often you will find that your hydrangeas are turning pink, whereas in the past they have been blue. This is a sign that the soil is not acid enough. Watering round the roots with alum and water, using one ounce of powdered alum to a gallon of water will correct this condition. If on the other hand you want to have pink blooms, dig in a little lime around the roots.

Wireworms are a great nuisance and can do a lot of damage. They can be killed with kindness. Get some ordinary linseed oil cake, such as is given to cattle and break it up into pieces the size of a large nut. Bury it in the soil a few inches. The wireworm will gorge himself on this, with the result that he will die almost immediately.

Very often you will find that your house plants become straggly and spindly. This is because they are not exposed fully to the light. The whole plant should be in the window, and the reason they become spindly is that the tops are reaching for the light, whilst the lower parts are more or less out of it.

When you are potting plants, it is more than essential that your pots should be clean. It is a good idea to have a tub of water with a little permanganate of potash in it. Keep your empty pots in that, but before you put them in, be sure and clean them off well. Use a hose to do this. When you take them out give them another good hosing and let them stand upside down for a day at least.



When planting out rose or other bushes always see that the roots have plenty of room and are well spread out. The above illustrations show the right and the wrong way to do this.

One of the worst pests in a garden is the bindweed, or wild convolvulus. This is hard to get rid of, and unless steps are taken to control it, it will spread over your garden and kill many of the plants in it. The most efficient way to deal with it is to spray it with sodium chlorate. Use a handful to an ordinary watering can full of water, and water the foliage with that. If you have a hand spray so much the better. You must however do this on a very still and dry day, and take great care not to let the solution get on any other part of the garden, as it will kill anything it comes in contact with. Repeat this spraying or watering in about ten days' time, and you will find that the bindweed will die very quickly. If any small pieces show, these can be dug up very easily.

When watering house plants, always be sure to see that the water is aired, more especially during the winter and colder months. If you draw the water direct from a tap it is cold and this very cold water will give the plants quite a shock. What you should do is to get a jug or some such container of water, and leave it in the room where the plants are for an hour or two, so that it will get to the same temperature, more or less, as the air in the room. This also applies to watering plants in a greenhouse. That is why you always should have a tub of water in it.

If you have not got any glass for cold frames, and want a good substitute, an old flour or sugar sack stretched out on a frame and oiled well with ordinary boiled oil will do just as well. It keeps the heat in and the water out, or in other words, takes the place of glass.

A very simple way to keep cats away from your flower beds is to bury a few bottles up to the edge of the top in your beds. Put in each of these a teaspoonful of ordinary liquid ammonia.

One of the secrets of growing good cabbages and annuals, as a matter of fact, is pricking them out more than once. Three times is not too many. This gives them a good root system, so that when they are finally planted out in the garden the roots will be strong and the plant will not have to use much strength in forming root. The result will be that it will grow quickly. And also having a good root system, the flowers or crop will be quicker and larger.

One of the secrets of success in raising plants from seed is to sow your seed in sterilized soil. This prevents "dampening-off" or wilting, which is a disease that is found in the soil, and is not the fault of the seed or from dampness in the ground. A very easy and simple way to sterilize soil is to fill a washing-up dish with the compost you are going to use for seeds and then put it in the oven until it steams well. Then remove it and let it cool off gradually. You can brush off any dead insects that may be there after it has been in the oven.

A very simple way to combat the onion and carrot fly is to strew your lawn cuttings between the rows. When you have done this, sprinkle a little coal oil on top of them. Also a few naphthalene flakes worked into the ground will help deter them.

The question of liming ground is usually uppermost in many gardeners' minds, and very often lime is applied when it is not needed. It is a very simple thing to find out whether or not your soil needs lime. All you have to do is to put some soil in a tumbler and fill it up with water until it is the consistency of thin cream. Then put a few drops of hydrochloric acid in it. If it fizzes it does not need any lime, but if it is flat it does. If it just fizzes a little, then a small quantity should be added to the soil.

When washing out window boxes, or emptying old cold frames for repainting, a little carbolic acid mixed with the paint will help to keep many pests away, more especially woodlice. It also acts as a preservative to the wood.

The question of removing stumps is always quite a problem, but there are two simple ways of doing so. The first is to bore holes—as many as possible—at the top of the stump and then putting in saltpetre at the bottom of the holes, which should be as deep as possible.

After this, fill the holes up with coal oil, and on top of the stump make a small fire, and keep it burning for as long a time as you can. In fact a good thing to do is to put an old coal oil can with the bottom taken out of it, resting it on three bricks and keeping it filled with slow-burning rubbish. What happens is that the saltpetre will smolder and eat right down to the roots, so that the whole thing will be a mere shell and easily removed.

Another way is to bore holes as before and fill them up with ordinary commercial sulphuric acid. Repeat this dose in about a week, and in a very short while the whole stump will be like hard bran and easily removed with a light pick and shovel. It will also not do the soil any harm. One thing you must be very careful about and that is not to get any of the acid on your clothes or hands as it will burn them quite seriously. It will eat through your clothing quicker than fire will.

One of the best helps towards growing better flowers and vegetables is to join your local horticultural society. If you have none in your neighborhood, do your best to get one started. There is always one somewhere near you, and you will find that the members of that will only be too glad to start you on the right path.

If you are making a pergola, it is a good plan to paint the bottom of the posts with either tar or creosote. This will make them last ever so much longer. If you use tar shake or throw a lot of fine sand on to the painted part. This will help make the soil stick round it more.

If you have ivy growing up the walls of your home, be sure and water this regularly. It always gets very dry and makes a perfect home for spiders, more particularly the little red spider, which does a lot of damage. These pests hate water and run away from it. Usually being under the eaves of the house ivy does not get its share of the rain.

During the winter always put your ferns out of doors when it is raining. Keep them there for about two hours. This must not be done, however, when there is any danger of frost. The rain not only refreshes them, but also the air does a lot of good. This also applies to the aspidistra.

When the tips of the leaves of your aspidistra, or the tips of the fronds of the ferns begin to turn brown, it is a sign that they need repotting. This should be done as soon as possible, but if it is not possible at that particular time, give them a slight watering with soot water. This should be put on the soil and not the leaves.

If you have a dry wall and want to plant seeds in some of the crevices, a good plan is to blow them in. This is easily done by putting a few seeds at the end of a glass tube, and blowing hard. Then throw a little soil in on top of them. Another way is to put the seeds in a damp ball of earth and push the ball where you want the seeds to be. There are many things that can be planted in such a manner, such as aubretia, some of the phloxes, and pinks.

Do not throw any old broom or long-handled tool handles away. These are invaluable for staking some of the larger plants in the garden. They should however be given a coat of green paint, so that they will not stand out amongst the natural color of the plants. The green will make them less noticeable.

There is one thing in gardening that must never be forgotten, and that is always keep the hoe working, or in other words, cultivate, and then cultivate some more. Even if you are just passing through your garden and see a weed, stop a second and pull it out by the roots. You will kill the weed and disturb the soil, which is another word for cultivation.

If you have a lawn or piece of grass that has been over-run with dandelions or plantains, and it is so bad that it is almost impossible to take them out by hand, put a pinch of sulphate of ammonia in the centre of each plant. This will burn them up, and you will have no more trouble with them. Of course, the following fall you will have to add more soil and sow some more grass seed.

When you have finished with your pea sticks or runner bean poles lift them from the ground as soon as possible. Be sure and shake all the soil from the ends and put them away for the winter. The easiest way to keep them is in a wedge made of two fairly firm branches of a tree. This will keep them off the ground and allow the air to get at them,

and also keep any pests from making their winter quarters there. This course should be followed more by those people who live in the larger cities, where it is getting increasingly hard to go out into the bush and get fresh sticks each year.

One of the most useful things to have in your garden is a barrel for soot water. This is easily made by getting a sack and half filling it with soot that has been kept in the air, but under cover for about three months. Then get an old broomstick or some such piece of wood and put it across the top of your barrel. Hang your sack on this so that it goes about half way down the barrel. Keep the barrel filled with water. When you first use it, it must be diluted but as you fill it up, less dilution is necessary. The water can be used until it is no longer discolored.

The same rule applies to chicken or ordinary manure. But when using chicken manure be sure and do not use it fresh, but keep it for some time before you put it in the barrel. This barrel should have a top on it, and should be kept in a shady spot, or out of sight. It is advisable to give it a coat or two of green paint, or the same color as your house.

No matter whether you have a large or small garden, always have a few bird boxes hung up in the trees, or on the side of the house. And in the winter always have a bird table on which to put food for the birds during the very cold and snowy weather. Birds can do a lot of good round a garden, more especially the insectivorous ones. They eat up a lot of pests in the way of flies and grubs.

READ—

"YOUR GARDEN"

DAILY IN

THE VANCOUVER SUN

Read

"Your Garden"

by

The Garden Man



A DAILY FEATURE THROUGHOUT
THE YEAR

in the

VANCOUVER SUN

