

GARDENING MADE EASY

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Many have written to our Agriculture Department asking for guidance on gardening. As a result of this, we are now happy to present the following brief outline of the main points. It should help and encourage you to produce a successful garden. Success is not difficult; it depends on how well we follow a few simple laws God has laid down. That means we must learn to work *with* God's creation and not *against* it as man has usually done!

1. WHY HAVE A GARDEN?

A. Anyone who *grows his own* food will assure you there is no substitute for the flavour and quality of freshly picked, home-grown produce.

B. You are largely what you eat and if most of your diet is produced on unhealthy soil, you will be susceptible to regular bouts of sickness and disease. The fact that most Western food producers rely on artificial fertilizers is proof that the majority of market produce is raised on unhealthy soil. If the situation was otherwise, the fertilizers would be unnecessary! Most farmers and gardeners also depend heavily on poisonous chemical sprays to control "weeds", insects, fungi, and micro-organisms. *On healthy soils these "aids" from the chemical industry are unnecessary.* The degree to which they are used is an indictment against the poverty which wrong methods have wrought on millions of acres.

C. The amount you can save by growing some of your own needs can be most effectively set aside in the family budget. It will provide that little extra premium one usually has to pay for naturally grown produce in those now not-so-rare *Natural Food Shops*.

D. Most gardening activity is limited, in countries like Britain, to the most pleasant period of the year and this is a grand opportunity to involve your family. Gardening is a healthy and rewarding activity in which every member can take part. You not only work together as a family, but literally work along with God and His creation in the particular environment which He has given you.

2. SOIL PREPARATION

A. Don't waste your time trying to grow vegetables in poor soil. Raising the level of soil fertility should be your first task if you want to establish a successful garden. Regardless of the general soil type in your area, the ground surrounding your home has probably been at some time a mixture of builder's rubble and subsoil which has been excavated for the foundations.

Over the years there will have been some build-up of soil fertility from the plant and root residues of all growth that has volunteered on your plot of land. However, if you want to get a healthy garden started quickly, a soil test will give you a general idea of the condition of your ground.

An enquiry at any office of the Ministry of Agriculture, a farmers' organization, a grain merchant, or a plant nursery and seed merchant will give you information on where you can get a soil test done for a few pence.

If the soil is not in a balanced state you can take a few simple steps to bring this about very quickly. Soil lacking in organic residues is "unbalanced" and will usually be in what is described as an *acid* condition. In rare instances (such as chalk and limestone areas) it may be alkaline. Most of the plants we are interested in growing will do best in conditions that are chemically very near neutral.

The pH scale is a set of numerical values which indicates how far a soil is one way or the other from neutral. 7 is the figure assigned to neutral. Readings above 7 indicate degrees of alkalinity and below 7 shows acidity. The addition of chalk or ground limestone will neutralize your soil if it proves on test to be acid. The supplier of this material will give you a fairly accurate guide on quantities, otherwise write to the Farm Programme at Ambassador College, Bricket Wood, St. Albans. We can advise you.

B. To control undesirable "weed" growth on any new area you wish to incorporate in your garden, you can loosen the whole area with a strong

gardening fork. As each fork-full of soil is loosened, the plants can be shaken free, and removed, but on no account should you turn each fork-full of earth upside-down!

We feel that a more satisfactory approach is to cut the grass down and let it rot where it falls. Immediately after cutting, the whole area should be given a heavy dressing of compost and/or straw. Compost should be at the rate of approximately 10 tons per acre (or 4½ lbs. per square yard), and straw over the compost to give a total depth of plant matter around 6" to 8".

This thick layer of organic matter has a number of beneficial effects:

1. Preserves an even soil temperature all year round.
2. Reduces evaporation under dry, hot and windy conditions.
3. In wet weather it absorbs large quantities of moisture, thereby reducing the chances of water-logging and soil erosion.
4. Its buffering effect on acid soils helps correct pH.
5. Ensures a rapid build-up of micro-organisms.
6. Moisture and temperature control promotes rapid organic decomposition by microbes and earth-worms.
7. Reduces sunlight preventing unwanted "weed" growth.

C. If you completely lack access to organic residues, do as we did on the farm here in Hertfordshire during our recent Sabbatical Year: allow a maximum of volunteer growth. Then mow it every time it reaches 3" to 6" in height and leave the clippings spread evenly over the entire area. (Remember, too many clippings at any one time will kill the plants you are relying on to produce more "green manure".) We even sowed down special crops for this purpose; e.g. Sweet Clover, Lupins, Mustard, Chicory, etc. A mixture of quickgrowing grasses, clovers and herbs is best.

D. Points A, B and C are the foundation of your future success. Take some time and trouble over this stage. (It is similar to house painting — the amateur always wants to rush in and begin using the brush, forgetting

that the most important part of the job is the preparation!)

E. Whatever tillage you decide to do should be confined to the top 4" of the soil and any action that buries organic residues should definitely be avoided. The old practice of "digging the manure well-in" is *not* recommended. It slows down decomposition and puts much of the plant food out of reach of surface rooted species.

3. PLANTING AND THINNING

This should usually be done in rows. That way most of the ground can be kept covered with mulch, the rows can be close together, and you will thereby avoid wasting much of your garden in path space. Remember paths represent back-breaking labour in "weed control". This form of exercise is neither pleasant nor profitable.

After most planting, a certain amount of thinning-out will be necessary as plants won't do their best if they are too crowded. The first thinning will usually be done after the seedlings have become reasonably well established. Some experience will show how plants can be left a little thicker than is desirable for maximum growth at maturity. As the crop approaches maturity, early "picking" can be done in a way that will thin the main crop out uniformly and to a degree that will allow the majority of the plants to reach their full potential.

4. RAISING SEEDLINGS

A. Remember you are practising a superior system of gardening, so any seedlings you can raise yourself will be better than you can expect to buy. The importance of this point will increase with your own experience and also with the length of time you have been observing God's laws of soil management (See point 9). Get seeds into the ground early, so your plants are in the advanced seedling stage (ready to be transplanted) as soon as extreme weather conditions have passed.

B. Your seedling bed should be located in a warm sheltered position in the garden. Sowing under glass frames is a great help for early germination in most climates. Generally, frames should be angled to catch any early morning winter sun that is available.

C. Successful germination depends a lot on sowing at the correct depth and maintaining adequate conditions of warmth and moisture. Seed size is a

good guide to planting depth. The small seeds should be covered with the least soil. Generally speaking, even the larger kinds should be sown a lot closer to the surface than the current practice. (Wheat, for example, is often sown at a depth of 2½" to 3" to achieve germination before surface moisture disappears. A build-up of organic residues would retain the moisture and shallower seeding gives faster root development.)

D. It is also of prime importance to obtain strains of seeds that are suited to your seasonal conditions. One should make every effort to secure seeds raised on fertile soil and without the aid of "artificial" fertilizers. When you achieve high fertility conditions, you should save most of your own seed for the next season. (We have had evidence here in the gardening department at Bricket Wood of quality improvement over three seasons. It was found that by saving certain of our own seeds each year, the results were better than the previous year.)

E. Don't allow yourself to be hypnotised by colourful propaganda about specially bred, high-yielding, new varieties. These days we are quite accustomed to seeing such glowing predictions crumble into the dust within a few short seasons. On average it will be wiser to go for some well-known variety that "somebody's father, or even grandfather used to plant!"

5. SUNLIGHT

In laying out your garden area, it is absolutely vital to select a sunny (and, if possible) sheltered area. The latter can always be taken care of with an artificial windbreak if necessary, but there is no substitute for sunlight! Over-hanging branches are one of the most common offenders.

6. HOW MUCH SHOULD YOU PLANT?

A. This is quite an important question if your area, your time, or your energy is strictly limited. The simplest rule is to plant "LITTLE AND OFTEN". It is better to sow a couple of rows 10' or 12' long (for the average family) every two to three weeks than one large area. This way a relatively small garden will keep the family in fresh produce for many weeks. These row sizes would apply particularly to such crops as: Peas, Beans, and Lettuce. For Cabbages and Cauliflowers, the quantity could be halved.

B. Remember plants like Parsnips, Brussel Sprouts, Spinach and Leeks will occupy the ground for almost a whole year!

C. If you are very restricted in your garden area, concentrate on such crops as Carrots, Parsnips, Onions, Beans and Salad vegetables. Then you might think of extending to Cabbage, Potatoes, etc.

7. WHEN TO PLANT!

A. Buy a gardening book that gives you a sowing and planting guide for each week of the year. It should also give you the appropriate plant spacings. A general guide to space requirements is the size of a plant when it reaches maturity.

B. Note the variation from year to year of the time on the Roman Calendar when God's Annual Holy Days occur. They can vary by as much as four weeks in any nineteen year time-cycle. You should expect to move your planting dates up to two weeks either side of the time recommended by anyone who is unaware of God's Sacred Calendar.

8. PEST CONTROL

A. Do not sow plants of the same family in the same part of your garden year after year. Rotation of the various vegetables helps reduce insect and fungal attacks. Your soil will remain healthier and yields, too, will be higher. Don't even have plants of what is regarded as one family follow one another. Melon, cucumber, squash and pumpkin should not follow each other. Another group that should not be planted after their own kind are cabbage, cauliflower, brussel sprouts, radish and turnip. Some claim it is unwise to plant tomatoes after beans or peas. Tomatoes can be successfully alternated with radish, cress or lettuce.

B. Some study of the way in which crops should be associated will be very helpful to the average gardener. This includes the relationship between crops growing beside each other, as well as following one another. Plant combinations are important in successful gardening. Most of the leafy vegetables plus tomato, cucumber and squash are regarded as "heavy-feeders" of available soil nutrients. It is desirable to precede their planting with a plentiful dressing of well-rotted manure. Root vegetables are generally regarded as lighter feeders.

A cover crop of legumes should be included in any form of rotation. Any of the clovers or lucerne will be very helpful in raising the level of available nitrogen in the soil.

Remember also that peas and beans are legumes and therefore soil improvers. Some believe a crop of lucerne will lower wireworm infestation. It is claimed that a crop of ryegrass will reduce pink root on onions. These are just two examples of pest control through soil fertility.

9. ORGANIC RESIDUES

A. Be sure to conserve all residues. In a small garden they are probably best fed back to the soil through a compost heap. (Many books will give detailed guidance on this simple process. Perhaps the best is by the father of modern composting — Sir Albert Howard. His book is called "An Agricultural Testament" and is published by Oxford University Press, London.)

B. If at all possible you should secure some barnyard manure for your garden, irrespective of whether you are making compost or not. We feel that the best balance of micro-organisms will be obtained from the manure of ruminants. Our order of preference is — cattle, sheep, goats, poultry and last of all horses. We will not recommend pig manure.

C. There are other satisfactory activators for the compost heap if animal manure is unavailable. We have used one that is made in the London area: QR Activator made by Chase Organics (GB) Ltd., Shepperton, Middlesex, England.

10. SOIL CULTIVATION

A. Most gardeners, even with a mulching system, will do a certain amount of cultivation and much frustration will be avoided if the soil is worked at the correct time. Clay soils can be particularly difficult to work with, both when too wet and too dry. There is a short, in-between period with most of them when they can be cultivated with minimum effort.

If your soil sticks to the garden tools unduly, then it is too wet and you should allow it more time to dry out before attempting to work with it.

If it is dry and comes up in hard lumps, you should water it, or wait for rain and catch it as it dries out next time.

These conditions are completely relative to the state of your own soil at any given time. If, for example, your present soil is a stiff and unyielding clay, it won't be easy to work with even in its optimum state!

B. As a beginner it will not be necessary for you to spend a lot of money on tools. The three main things you will need are: a good strong garden fork (not over-large if you are a woman), a claw cultivator (or hoe), and a rake with strong teeth.

11. SABBATICAL YEAR

"Six years thou shalt sow thy field, and six years thou shalt prune thy vineyard, and gather in the fruit thereof; but in the seventh year shall be a sabbath of rest unto the land, a sabbath for the Lord: thou shalt neither sow thy field, nor prune thy vineyard." (Lev. 25:3-4)

In a purely physical sense, the Sabbatical Year is an observance God has commanded to focus man's attention on the need to maintain the level of those vital organic residues in His soil.

Man has displayed before his very eyes a God-created natural system of regeneration. The life-cycle of every plant begins in the soil and ends there too, through death and microbial decomposition. This cycle is going on all the time, but it is more dramatically fulfilled every year in the leaf-cycle of the deciduous trees. We also see the yearly growth pattern of the annual plants. All this evidence points man to the fact that plant-life depends on the decayed residues of pre-existing plants. (Rom. 1:20)

The return of organic residues to the soil is fundamental to the success of all agriculture. The continued supply of nutritious food for mankind cannot be maintained any other way!

But mankind has deliberately rejected the laws of God; to the point that he is now unaware of any command to rest the land. Man is using "chemical" fertilizers in a desperate attempt to suspend the penalty for non-observance of the Sabbatical Year.

For fuller details on this observance you can write to the Agriculture Department, Ambassador College, Bricket Wood, St. Albans, Herts., and we will be happy to send them to you.

12. TITHING

A. If you are unfamiliar with God's

law of tithing, you should write to Ambassador College and request your copy of the booklet, "Ending Your Financial Worries". It will give you a very good understanding of this matter which is vital to your success in any walk of life.

B. Many who know about the principle of tithing ask if they should tithe on the produce of their vegetable garden and if so, then how can they go about it?

The answer to the first part of the question is: Yes, God definitely commands tithing — even on garden vegetables. "And ALL the tithe of the land... is holy unto the Lord." (Lev. 27:30). "Thou shalt truly tithe ALL the increase of thy seed that the field bringeth forth year by year." (Deut. 14:22).

Then how do you tithe such things as beans and cabbages etc.? When you understand that tithes are to go to God's Ministry, it is then only a matter of how far you are from one of His representatives. If distance makes it quite impractical, we are to follow the principle set out in Deut. 14:24-25, "And if the way be too long for thee, so that thou art not able to carry it; or if the place be too far from thee... then shalt thou turn it into money." This money can then be carried or sent to the appropriate destination.

If your tithe has to be converted into money, the amount can be calculated from the ruling market price. You know the sources from which you would have to buy, had God not blessed you in your garden and it is a simple matter to find out current prices.

SUMMARY

Yes, gardening can be easy if you follow the principles outlined in this article. On the other hand, it can be very hard and unrewarding work. Fortunately back-breaking labour and loss through disease are not things we just have to put up with in gardening. Many people have this idea because of the mistakes of others. Obedience to God's laws will produce abundant fruits, healthy, exercised bodies and a real sense of accomplishment.

Hundreds of books have been written on the subject of gardening, so it can't be adequately covered in twelve short points, but if you understand:

1. WHY YOU SHOULD HAVE A GARDEN — you will have a real goal to success.

2. SOIL PREPARATION — you can make almost any soil produce.

3. PLANTING AND THINNING — your garden lay-out will be successful.

4. RAISING SEEDLINGS — you will have the right strains ready for planting at the right time.

5. SUNLIGHT — the garden will be correctly positioned.

6. HOW MUCH YOU SHOULD PLANT — you can make the minimum area produce the maximum results over the longest time.

7. WHEN TO PLANT — you will avoid many disappointments.

8. PEST CONTROL — you will preserve nature's balance.

9. ORGANIC RESIDUES — you will avoid artificial fertilizers and produce vegetables of quality.

10. SOIL CULTIVATION — you will make hard work easy and get better results at the same time.

11. THE SABBATICAL YEAR — and observe it at the right time, God will bless you for it.

12. TITHING — you will be blessed accordingly.

All twelve of these points are a matter of physical obedience and the last two have a vital spiritual significance. Taken as a whole they can help you to live a fuller life in many ways and you will be continually reminded that — "... neither is he that planteth any thing, neither he that watereth; but God that giveth the increase." (1 Cor. 3:7)

Even so, your problems won't all evaporate overnight! In which case if you think we can be of any help in your efforts to provide your family with a healthy diet, please feel free to write to us for further information.