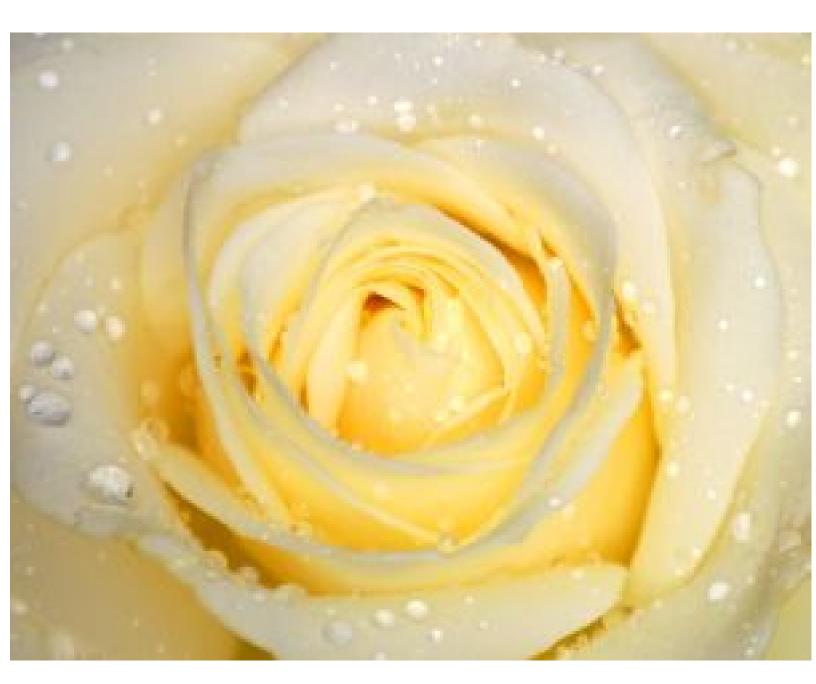
Secrets To Roses Unveiled



Secrets of Roses Unveiled Table of Contents

> Introduction Page 3

Chapter 1: Roses in History Page 5

Chapter 2: The Anatomy of The Flower And the Hobby Page 11

> Chapter 3: The Big Three Page 19

Chapter 4: Varieties of Rose Plants Page 24

> Chapter 5: Growing Roses Page 41

Chapter 6: Care and Maintenance Page 59

> Conclusion Page 72

Appendix I: Glossary of Terms Page 73

Appendix II: A Short Lesson On Rose Petals Page 76

Resources

Page 78

References Page 79



mazing, isn't it? A mystique shrouds the rose. It's a flower veiled in romance, and the mystery of love. No other flower creates such a response in so many individuals.

No wonder it is such a popular flower. Whether you admire roses from your kitchen table early in the morning as you drink your coffee and gaze into your garden, or you are surprised with a bouquet from someone you love; roses epitomize everything wonderful about flowers.

They also capture the essence, the allure, and the mystique of love -- young love, mature love . . . and perhaps even the love of life!

So it seems strange, doesn't it, that the same rose has such a reputation for being, well, hard to get along with. Supposedly the rose is difficult to grow, it's touchy, it's choosey . . . it's just about everything "bad" about flowers that could be conjured up.

Luckily for us, the rose doesn't live up to its naughty reputation. Sure, if your aim is to grow that rose to win a local or national competition, you are spending massive hours tending to its care. But consider the owner of the purebred dog who is placing his beloved into competition. He too spends hours grooming him and tending to his needs, making sure every detail is in place. Not many people even raise an eyebrow at that!

But if you just want the beauty of the rose gracing your yard, then it requires only a little more care than your average flower. It's certainly not the "bad boy" of the garden that so many make it out to be.

The purpose of this book.

If you're new to growing roses, this book provides you with an overview of not only the history of roses and the varieties, but with some broad guidelines to help you care for your new purchases. I cover all aspects of rose ownership, from helping you to consider which roses would suit you and your geographical location to when -- and how -- to plant them, to how to make sure they survive wintry weather.

I also provide a glossary at the end so should you get together with other rosarians -- those who love, grow and tend roses! -- you're able to talk "roses" with all your new-found friends.

How to use this book wisely.

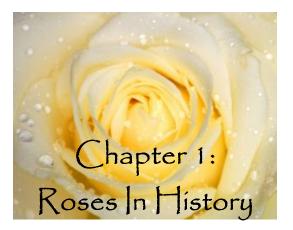
I want you to get the most out of this book you possibly can. That's why I encourage you to read the volume over once. Get a feel for the topic, the language and familiarize yourself with roses and their care in general.

Then, I'm sure you'll go back to specific sections as you need to. Once you have your rose plants in your house, you may be consulting various chapters depending on what you knowledge you need to brush up on.

Of course, as you progress in your hobby you may just turn back to this book again and again just to read about the topic.

This book is meant to cover as much rose territory as possible and to inspire you to continue to read everything you possibly can about the topic as your interest and passion grow.

Welcome to the large and ever growing ranks of rosarians -- those who love, grow and care for one of the oldest and most beautiful flower families in the world -- the rose!



A Brief Overview and Historical Perspective on Roses

Botanists believe the rose in some form flourished long before humans walked the earth. Pretty hard to believe? Definitely hard to imagine.

It's thought that the human species has cultivated roses for more than 5,000 years. It makes you wonder . . .

Ugh was in trouble. Big trouble. Ugh was your average caveman. And Ugh had an average cavewife. Ugh loved his cavewife. But Ugh made one mistake He wasn't supposed to answer yes when his wife asked if she looked fat in the new woolly mammoth fur she made. Who knew?

So Ugh was now outside in the cold with the wolves. He needed to find a way to get back into the cave and enjoy his cavewife's company again!

Ugh roamed the fields next to his cavehome, pondering his lonely existence. That's when he noticed this bright red flower. "Pretty petals," Ugh thought to himself. "Nice color! It's worth a try."

Ugh picked as many of these flowers as he could count on his two hands. And then, just to be safe, he picked two more. He took a deep breath. He was every bit as scared to walk back into his cavehome as he had been to face the woolly mammoth that he killed that . . . by the way got him into all this trouble in the first place.

Carefully carrying the flowers, Ugh entered the cave. He expected his cavewife to be furious with him. And the truth was, she gave him an irate look . . . until she saw the armful of flowers he was carrying. And then she smiled.

"I'm sorry," he said in his own cave-grunt way. He stuck out his arms. "Here . . pretty . . . like you!"

"I'm sorry, too" she cave-grunted back.

And that's how roses got to be the official language of love (and 12 became the standard number of roses to deliver!)

Okay, so maybe the rose industry didn't develop this way. But, it's a nice story nonetheless.

But I happen to know for a fact, though, that some 35 million years ago, roses in some form existed. We've got fossil records that record this!

Actual cultivation of roses, however, didn't occur until nearly 5,000 years ago in one of the most unlikely places (or perhaps you won't think this so unlikely): China.

Chinese records indicate that some were cultivating roses in this advanced society as early as the fourth and fifth centuries AD. References to cultivated roses are apparent through the Song Dynasty which ruled from 960 to 1279 AD. These roses were perpetually flowering and raised in large cities.

In fact, the most outstanding fact about this discover is the sheer number of varieties were already in existence. One city reported it had more than 41 alone.

By the time the Ming Dynasty became established from the years of 1368 to 1644 rose cultivation became a relatively established activity. If you've ever head of the "China rose" then this fact probably doesn't come as much surprise. It's a complex of both natural and cultivated hybrid plants that has evolved for more than a thousand years in the gardens of this ancient country.

Perhaps then it's no coincidence that the wild Tea rose actually came from upper Burma and southwestern China. It wasn't introduced into Europe until 1888, however, when Sir Henry Collett discovered it in the Shan Hills of Burma.

During the Roman period, the shift to rose cultivation moved toward the Middle East where this flowering plant became extremely popular. Believe it or not, Middle Easterners used the petals as confetti, as well as remedies for various illnesses and, of course, as a source for perfume. Not only were roses grown in private yards and courtyards, but the Roman nobility established large public rose gardens just south of the city of Rome so the entire population could enjoy these wonderful creations.

After the Roman Empire fall, the popularity of roses appeared to ride in and out of tides of whatever the gardening trend was at the time. Certainly, that's to be expected. This time was noted -- called by many the Dark Ages -- didn't afford your average person the luxury of tending to a flower garden.

But the fate of the rose, well . . . rose again during the fifteenth century when it became the symbol for the factions vying for control of England. The white rose became the symbol for the city of York; the red rose the symbol for Lancaster. And now you know why it is, to this day, called "The War of the Roses."

During the seventeenth century, roses were in such great demand that royalty declared both roses and rose water legal tender. That means people were legitimately able to make commercial purchases using roses or rose water.

Napoleon Bonaparte's wife, Josephine, loved the flower so much that she established a large and impressive collection of them at Chateau de Malmaison, an estate several miles west of Paris.

The garden soon became the setting for the famous botanical illustrator, Pierre Joseph Redoute. In 1824, he finished his collection of watercolors called "Les Rose." This is still considered one of the finest records of botanical illustrations ever created.

But it wasn't until the late eighteenth century that purposely cultivated roses were introduced into Europe from China. And because of this, most modernday roses actually owe their ancestry to this country.

For the most part, the flowers which were imported from China were repeat bloomers. This was different from what grew naturally in Europe. And this difference intrigued those gardeners of the time.

Not only were individuals intrigued, but they became the overriding interest of some hybridizers. This created the perfect scenario to take the native Chinese plants and breed them with the native European plants. Soon, roses were being bred for such traits as hardiness and a longer, lovelier bloom.

Whatever botanists know biologically about this flower and whatever its history as symbols of war, the rose is without a doubt best known as being the international and eternal symbol of love -- young love, lasting love, undying love. How this exactly came to be is lost to the legends of time no doubt. But more than one person has noted the relationship of the word rose the Greek god of love "Eros." Hard to deny all the letters are there -- just in a slightly different order. An anagram if you will. Coincidence?

Romance of the Rose, one of the most popular French poems of the Middle Ages, uses the pursuit of a rose by a lover as an allegory for the philosophy the troubadours of the time had towards the ideal of love.

"What's in a name? That which we call a rose by any other name would smell as sweet." ~Romeo and Juliet

The famous poet Robert Burns compared the love of his life to a "red, red rose, that's newly sprung in June." German wedding customs involve the giving of a silver rose. The groom is required to send one to his bride before the marriage ceremony. This was such a legendary tale, that Richard Strauss fashioned an opera, Der Rosenkavalier around the idea.

The ultimate

symbol of secrecy

A less popularly known symbol now, the rose is also a sign of a secret. In sixteenth-century England, for example, a rose was at times worn behind the ears of servants, tavern workers and others, indicating the wearer had "heard all and told nothing."

And in Germany, around the same time, diners who found a rose as a centerpiece on their table, knew they could talk freely. Think about it, we even have an expression "sub rosa" which literally means "under the rose." Historians believe this phrase originated with the custom of carving a rose over the door of the confessionals in a Catholic church.

Even Medieval alchemists -- those searching for a way to turn common substances into gold -- adopted the rose as a sign of secrecy. The came to symbolize their highly-guarded secrets of their art.

Perhaps no other rose -- is so intertwined with history, war and peace than that which was developed in the twentieth century. Its renown is legendary. And its story is . . . well, the stuff that blockbuster movies and best selling novels are made of. But what makes this story all the more remarkable . . . is that it's true.

The Peace Rose.

Its tale is not nearly as well known as it should be. But, there is no better true life story that epitomizes the hopes and relief of a world following World War II. I'll not keep you in suspense much longer.

The year is 1935 -- June 15 to be exact. The location, France. Francis Meilland and his father pollinated a rose. The following summer, they took a portion of its eyes to graft. By October 16 of that year, the first buds were opening.

Three years passed. It is now 1939 and it appears inevitable that Germany is about to invade France. Meilland sends eyes of this plant to rose growers he knows in Turkey, Germany, Italy and the united States.

One of the recipients was Robert Pyle of Canard-Pyle, a well-known and well respect rose distributor and developer. He not only propagated the plants Meilland sent him, but in turn he sent the results to the American Rose Society for testing.

In 1944, Pyle wrote to Meilland. He told his good friend that he planned to release the plants with the end of the war. A naming ceremony was planned by the Pacific Rose Society Annual Exhibition on April 18, 1945 -- the same day that Berlin fell. Pyle thought the name "Peace" would be an appropriate tribute.

At the same time, Dr. Ray Allen, secretary of the ARS sent each of the 49 delegates of the very first meeting of the newly formed United Nations (then held in San Francisco) a single, long-stemmed "Peace" rose and this note: "We hope the 'Peace' rose will influence men's thoughts for everlasting world peace."

Did this rose actually inspire a world to negotiate peace? Probably not, but it symbolized a hope for future peace. And where there is hope there is life.

And that brings us to today.

Buying a dozen? While we may never know if we owe the classic dozen roses to our caveman friend, Ugh, we can say with just about certainty that the roses

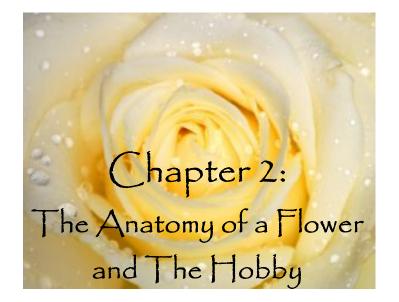
were grown by a commercial rose grower in huge rose fields in fairly temperate climates (Just try to imagine acres of roses!).

And if you bought your roses in the United States, then the odds almost guarantee that they were grown in one of these three locations: the San Joaquin Valley in California, in Texas or in Arizona.

In the United States alone,

50 million roses are sold each year.

Roses are grown in these fields for a full two years prior to being harvested. Then the plants are allowed to lie dormant are stored and then bare rooted -basically this means there is no soil on their roots -- in huge, moist, refrigerated facilities to keep them fresh before being shipped to gardeners, nurseries and garden centers in winter or early spring.



Getting Acquainted With The Physical Characteristics of The Rose and The Passion Behind the Flower

know! I know! This doesn't sound like a very exciting chapter. And it might scream at you to move on to the next chapter. But I assure you that sooner or later you're going to return to it.

One of two things will occur (or perhaps both). You're really getting into your hobby of growing roses -- which by the way makes you a rosarian. Suddenly, you're thrown in with other rosarians who are talking about the different areas of their rose plants. And you haven't a clue what they're talking about.

So you turn to this chapter to learn the names of some of the more important parts.

Or, you're really getting into your hobby of growing roses -- and you realize you want to learn more about the anatomy of the plant you've come to love. BOOM! You find yourself revisiting this chapter

I'm confident you're going to read this chapter now or later -- or now and later! While it may seem boring to you, learning all there is to know about roses can be the most engaging thing on earth, once you're captivated by their beauty and fragrance.

What's in a rose?

Let's take a quick look at the entire plant from the roots on up, shall we?

The roots. These, as with any plant, act as the water supply station for the plant, taking up water as well as nutrients from the soil. Without a solid root system your rose just won't thrive. You'll notice later in the book, when we talk about planting and transplanting, we take note of how carefully you need to handle this area of the plant.

Canes. To a rosarian it's a cane -- to your average man (or woman) on the street, it's simply a stem. Whatever you call it, it grows from the crown of the plant -- just where the cane ends and the roots begin. Rose canes are usually spotted with thorns (which many a philosophy has noted!). But there are some varieties of roses which really are thornless!

Leaves and branching canes. These grow from a part of the rose called the bud eyes, the small buds that sprout at intervals along the cane. You may not ever have noticed them before. But if you look close enough, you'll indeed discover them.

The leaves are usually found in five-leaf leaflets. As the rose plant thrives, the new canes sprout from both the crown of the plant as well as from the junction of the cane and leaflets.

Flowers. The flowers of a rose plant are known by several names: flowers, blooms or blossoms. Take your pick!

Once a flower has finished blooming, though, it's called a **spent bloom.** And as you'll learn, should be cut off. This action encourages repeat flowering. It's also called dead heading.

The rate at which a rose plant can actually form a new flower in its place is called a **repeat.** Most of the modern roses -- those developed after the nineteenth century are either ever blooming or free blooming. This means that they are producing flowers nearly continuously throughout the growing season.

Stamens. This is the male part of the rose, the portion that produces pollen. It's made up of the anthers and a filament. If you look closely inside the petals of the rose you'll see them. Very thin stems topped with rounded objects.

Anthers. Located at the top of the stamens, these parts are actually the pollen producers. This pollen fertilizes the ovules or eggs, located at the bottom of the pistil, which is the female portion of the rose located deep inside the hip of the flower.

And as you might guess from this, rose flowers can self-pollinate. But when this happens the offspring is rarely as healthy or as pretty as the original plant.

Sepals. These are the leaf-like structures covering the rose bud even before they open, protecting them.

The sepals open slowly to reveal the color of the developing flower. Finally, they pull away entirely, allowing the petals of he bud to emerge and unfurl.

Some rosarians consider the sepal an extremely attractive part of the flower, especially so when the feathery ends of the structure extend above the top of the bud.

When the sepals finally drop, allowing the petals to open, their beauty is many times still evident. They create a simply outstanding underpinning to a beautiful flower.

She loves me, She loves me not!

Hmm. Remember that old game you used to play with wild daisies? With each "she loves me" or "she loves me not" you'd utter, you'd pull a petal of the flower. The last petal told the truth. So how often did she really love you?

No one would ever dare play such a destructive game with a rose. Yet, the rose -- depending on its variety -- has a host of petals -- sometimes too many to count.

And sometimes, they're just unique. Take for example, the famous Green Rose. Formally called the *Rosa chinensis viridiflora*, the flower of this rose is green. But, upon closer examination, rosarians explain that what appears to be petals of a bloom are actually a host of sepals.

The petals of the rose.

Normally, a rose bloom is defined as having a minimum of five petals. But as you'll soon learn from the vast varieties of roses, this is seldom the case. In most cases, roses have more -- many more -- petals than just five.

In some cases so many petals exist on a single bloom that there are literally too many for the bloom to open fully except in the hottest of weather.

And in many cases, the number -- as well as the color -- of the petals are just so fabulous that even if the plant blooms only once during the summer . . . well, it was well worth the wait just to witness this gorgeous flower.

That's close to the case of the famous hybrid named "Uncle Joe." Uncle Joe's notoriety came from its proliferation of petals on a single bloom. This plant's flowers were so loaded down with petals that many of the flowers ended up as squishy rotten balls at the top of a strong 6 foot tall cane.

The most common of the petal formations -- and yes, there is some uniformity and commonality to these! -- fall into three major categories: single, semidouble, and double or sometimes called fully double.

The **single formation** is explained in its name. It's simply a single row of petals -- and yes, the most usual number of petals is five.

The **semi-double formation** contains only two --sometime three -- rows of petals with 12 to 16 petals in all.

The **double formation** or fully double formation contains . . . well, lots of petals. A bloom is considered as part of the formation if it has more than 17 petals.

Sometimes you'll find several more formations. And this is where the names get a little tricky and can cause some confusion. Some rosarians call a **fully double formation** any flower that ahs between 26 and 40 petals.

If you speak with other rose hobbyists be aware of this overlap in names. But some roses have even more than 40 petals (imagine the beauty!). These are normally called **"very double."** (No, I agree it's not a very imaginative name, but it fits the description!)

And then there's the arrangement

of the petals.

While we're on the topic of petals, let's go into just a little bit more detail. Because in addition to classification of roses by the number of roses, these beauties are also classified by the arrangement of the petals as they unfurl. (Do you ever think that rosarians just love to classify things?)

But, it's true. And this classification comes into use when the flowers are in exhibition.

Many-petaled rose flowers with great or formal form are often called **exhibition roses.** These blooms are gracefully shaped whose petals are symmetrically arranged in an attractive circular outline coming to rest in a high pointed center. Yes, indeed, it is really a thing of beauty.

The arrangement of this unfurling of petals is judged on the symmetry as well as the spacing of the gaps. The center of the bloom -- for judging purposes -- should be well defined, rising high within the flower and pointed.

From the side, you should notice the natural symmetry of the structure. The petals unfurl -- ideally - uniformly from the center.

The outer row of petal should be as close as possible to a horizontal plane.

Of course, each variety has its own inherent characteristics, as you might expect. But each exhibition rose is at its unique perfect phase of bloom when it is between half and three-quarters of the way open.

When you're growing a garden, **decorative or an informal rose**, the bloom itself is not held to quite the same high standard. The flower itself is not as well defined as an exhibition rose, nor does it need to be as high or as pointed in the center.

Ruffled, sometimes called wavy petals, as well as cupped, those turned inward are accepted. This variety also has fewer petals than most of the other classifications.

If rose forms are so important, just exactly, you're wondering right now what affect the formation of the petals themselves. Well, if you're thinking that it's mostly genetics, you're right . . to a point

Three of the most important factors -- after genetics -- in rose formations are climate conditions, cultivation and the exact weather conditions as well.

A rose of substance.

Petals are also viewed and judged by their substance. This is defined by the petals' stability and durability. Most importantly -- and this should come as no surprise -- substance is also judged by how long it retains its quality in a vase.

The substance of a rose petal also depends on the amount of moisture the petals have absorbed. But, perhaps most importantly, substance is demonstrated in the texture, firmness, crispness, thickness and toughness of the petals.

You can determine the substance of petals for yourself. Touch a petal. Go ahead, the chances are it's not going to fall to pieces (not if it has any substance at least!). Is the petal thick? Look at it closely. A true petal of substance has an opalescent sparkle and sheen to it. And if it's a red rose, it'll have a velvety appearance to it.

The color of petals

Of course, rose petals are also judged by their colors. The elements that contribute to the petals degree of cover are . . . dare I say elementary. As you can imagine the bloom whose petals are bright, clear and vivid are usually prized more than others.

But in addition to that, the hue of the color is a factor as well. This factor includes the visual impact the petals has on the eye as well as how it distinguishes itself from other colors.

To this end, rosarians refer to something called chroma. This is the intensity and purity of the hue. Ideally, the petals should have no gray or white in its hue. And in fact, the idea petal of substance would be an amazing blend of brightness and chroma.

Budding:

Not exactly what you might expect.

Budding is a term rosarians use when a portion of one plant is grafted onto the rootstock of another -- as opposed to growing on the original plant's roots.

This has been a fairly popular way of propagating roses, especially among commercial growers. You look puzzled. You're wondering why?

Many commercial growers believe that roses just grow better using this method. First, the plants themselves take less time to establish their root systems.

And the growers enjoy a larger percent of roses thriving on the rootstock than they do with roses on their original stock.

"God gave us memory so that we might have roses in December." ~ James Matthew Barrie

The growers simply take the canes (or branches) from the one rose plant, cut off the bud eye at the junction of the cane and leaflet and then insert it under the bark of the cane of a rootstock plant. A simple, uncomplicated operation.

When the canes and foliage above the bud are cut off, all the plant's energy is then focused toward making the newly budded eye grow.

Bud eyes from the desired variety have all the genetic material to create a new plant that's identical to the original.

The point at which the bud is inserted into the bark of the rootstock plant is called the bud union. On mature plants, the bud union looks very similar to a knob. As the plant grows in your garden, though, new, large canes grow from directly above this bud union.

In the colder climates, the bud union is the portion of the plant that's most important to the plant's survival during the harsh, winter months. As you learn later, you're going to plant the bud union several inches below the ground in the cold climate and then protect it by covering it with a mound of soil.

Learning about the ARS.

The more time you spend with your roses, the more interested you're going to become about learning everything you can about the flowers. And when you need knowledge on this subject, there's really only one place to turn: The American Rose Society. They are known as the archive for the entire world's rose knowledge. I know that's quite a claim, but it just happens to be true. It is, without a doubt, the larges specialized plant society anywhere!

In addition to its gigantic membership of rose hobbyists and rosarians, the ARS produces an excellent monthly magazine. It also sponsors and conducts local and national contests.

Ding, dong!

American Rose Society calling!

Have a problem with your roses? Don't know who to call? (No, not the Ghostbusters -- or even the Rosebusters!) Start with the ARS. This group certifies a large number of consulting rosarians who can help you with the needs of your roses. And -- get this -- they even make house calls.

The American Rose Society also has an international arm. Called the International Registration Authority -- Roses, this organization registers new varieties of roses to ensure accurate records. In this way they know that the names of the new roses, the descriptions, and everything about them meet a uniform standard.