

**GETTING TO KNOW THE FABULOUS
WORLD OF ORCHIDS!**



*Wiley F. Barker, MD
Barker Orchids*

www.caringfororchids.com

YOU Can Grow the World's Most Romantic Flower, an Exotic Orchid, in Your Own Home!

You see beautiful orchids 'most everywhere you go. They can be found in restaurants, hotels, and stores as elegant decorations and for sale in grocery stores, warehouse clubs, and even gas stations.

They nonetheless remain somewhat of a mystery to most folks. (Do you know what makes an orchid an orchid?) Read on!

They have become known as the world's most romantic flowers, often purchased for very special occasions. In fact, today, orchid sales are matching sales of roses in a dollar-for-dollar competition!

Drawn to their beauty, many admirers purchase orchids completely unaware that it is quite simple to keep them alive and flowering again and again every year indefinitely in their own home without a greenhouse.

And it's not for lack desire either. Most people would love to know how to care for their first orchid plant and have it bloom, year after year **forever**. I'll tell you how you can learn exactly what to do.



My first orchid bloomed in our kitchen window in 1951 and it is still blooming every year! Its latest flowers have just opened as I write this.

Since then, despite a demanding professional life as a busy vascular surgeon, growing these gorgeous flowers has continued to provide me with a most relaxing pastime.

My collection has progressed from two plants on a window sill in 1951 to hundreds in three greenhouses, a lath house and a convenient back fence.

How would YOU like your life full of the pleasure of knowing and growing these enchanting flowers in your own home? You can!

The orchid family is huge --- at least 30,000 species --- but the target of my affection and yours, once you get to know them, are the seven varieties that are easiest to grow. They are the ***Phalaenopsis, Dendrobiums, Oncidiums, Cymbidiums Cattleyas, "Lady Slippers" and some Vandas.***

These magnificent flowers that most think of as delicate hot-house products are descendants of what were once upon a time truly wild orchids --- from Brazil, from Ecuador, from Thailand --- and they have been tamed just for you!

Furthermore, these are the types of orchids that are being sold today in many regular garden nurseries, as well as by the great commercial orchid growers and in more unusual markets.

Ernest Hetherington, a world renowned expert, now at the Huntington Botanical Gardens in San Marino, California, comments that orchid growing has become a cottage industry with hundreds of small growers now making excellent plants available to everyone.

Many of these beautiful flowers ARE easy to grow. You can quickly learn a few simple rules. Before you know it you will be impressing all your friends with your successes. How rewarding!

You are now one of the few people aware that **orchids grow wild almost everywhere around the world** --- Alaska, Australia, China, New England, France, Iran, Texas, Maine, all over the United States.

They will thrive in your home environment wherever you can give them plenty of light, moderate humidity and movement of fresh air. Most of them like the same temperatures in which we humans are comfortable. In fact most will be very happy spending the summer in a pot under a tree in your garden.

For more specific information on each of the seven most easily grown varieties listed above, [click here to order](#) "Caring for Your First Orchid", a more extensive e-book I have written which includes pictures, illustrations, and more than 7 times the information presented here.

FREQUENTLY ASKED QUESTIONS

For the more than half a century that I have been growing orchids many people --- from grocery clerks to English professors, from engineers to thoroughly experienced gardeners --- have asked me questions about this fascinating hobby. Here are some of them:

Can I keep the plant after the flowers fade?

Absolutely. That first plant of mine from 1951, *Epidendrum atropurpureum*, is getting ready to bloom again as I write this today!

As the bottom blossom on a spike fades, cut it off the stem. When all on a spike have finished blooming, cut the stem just above where it rises from the plant bulb – don't cut off the bulb itself. The plant needs the energy left in the bulb for next year's growth and next year's flowers.

How soon will my plant bloom again?

Probably next year, but some plants are more prolific than that and will keep on making flowers throughout the year. Don't EXPECT that bonus often, however.

How long will my plant live?

Some native plants have continued to live and grow for hundreds of years. That first plant of mine that is still alive and healthy after more than 50 years was almost certainly once a plant growing in

the jungles of Mexico and might have been growing there for untold decades.

As one end of the plant develops and renews itself, the older parts may wither and die, but the essential germ plasm survives and continues its cycle. Life continues!

How often should I water it?

Not too often! Most orchids like to be watered thoroughly, then need to dry out pretty much. Some plants like to be bone dry before being watered again. The larger the pot the plant is in, the less often you need to water it. When in doubt, wait another day.

What should I feed it?

Best to use an orchid food that you can buy at most nurseries, and best to start with a balanced mixture --- 10-10-10, a **ratio** that describes the relative content of nitrogen, phosphorous and potassium. Use it at the most dilute level recommended and don't feed more than every third or fourth watering.

DO NOT feed it ordinary plant foods, especially those containing urea. The orchid can't utilize it and it may burn the delicate roots.

When do I feed it?

Once a month on average --- a little less in the winter, a little more when there is active growth.

When does it need to be repotted?

Almost surely, not yet! Most orchids do well with repotting every three years, although the lady slippers usually should be repotted annually. The best time to repot is just as active new growth starts.

That you can usually tell when you see the first new green root tips appear at the base of the stem or “pseudobulb”.

If your plant is a **Phalaenopsis** or **Vanda**, new roots arising from anywhere on the main stem of the plant signal this phase of growth appropriate for replanting.

What material should I repot it in?

See if you can tell what it is in now and use that same kind of material. Fir bark (medium mix) is a pretty standard mix available in most good flower nurseries. Be sure not to use decorative bark or pine bark and NEVER plant it in plain old dirt!

Some plants will live happily in nothing more than river pebbles. They don't receive any nutrition from the pebbles but simply use them as a foundation and support on which to grow.

If the plant is in plain pebbles you will need, therefore, to supply some food for it. (To learn the best for your specific plant, you will find just what to use in some detail in my e-book “Caring for Your First Orchid” available on my website www.caringfororchids.com).

Can I grow it outside?

Most orchids will thrive during the warmer months in most climates in a pot under the shade of a tree --- almost any tree but a eucalyptus! If the weather gets too hot, spray it lightly in the early afternoon. When the weather begins to get down in the 40's Fahrenheit then it is time to bring it under cover back into the house.

Should it be pruned?

NO! Especially important, don't trim off those funny looking errant roots that occasionally stray from the pot. They are the source of food and moisture for the plant. Ultimately, the oldest parts of the plant will dry up and can be trimmed, but wait until you read more about orchids in “Caring for Your First Orchid” before you start that

.Should I plant it in my garden?

There are a few popular varieties that might grow in a rich organic soil, but not the ones you are apt to find for sale. Don't try it!

Are any orchids fragrant?

You bet! At least a quarter of all orchids are fragrant, some dramatically, some almost offensively so --- but the latter aren't *usually for sale*.

Many *Cattleya* plants, especially those with very frilly lips are endowed with a heliotrope-like fragrance, but it is variable in its appearance, if you can say a fragrance appears!

This fragrance and frilly lip are their inheritance from *Brassavola digbyana* which is the national flower of Honduras.

Epidendrum atropurpureum, that first acquisition of mine, has a lovely cinnamon-like scent.

I'm allergic to many flowers; what about orchids?

Most flower allergies are sensitivities to the nearly microscopic grains of pollen that float free. It is quite unlikely you will exhibit allergy to orchid pollen, because the tiny pollen particles in the orchid family are clustered together in two to eight small (2-3 millimeters ---an eighth of an inch or so) masses that do not float free.

Aren't they parasites?

No, they are not. A parasite gets its food from what it is growing on. The orchid, however, is often an aerophyte, or air plant, and also an epiphyte, meaning it just holds on to where it is growing, whether it be a root, a tree, or a rock without gaining sustenance from its roothold. Nor are they carnivorous!

Many popular orchids, including the ones I am suggesting for you, are so-called air plants. They grow on various structures and their roots need to grow in the air from which they get their moisture (as rain or sprinkling) and food (dust, dead insects, bird droppings, etc.)

You said many are air plants; what about the others?

Large numbers of the common wild orchids, however, are not air plants but rather are terrestrial, that is, they grow in rich moist soils full of organic matter. Many of these terrestrial plants in the United States are, or should be, treated as endangered species and left in the wild. Enjoy them there!

LEGENDS AND LORE

Orchids have been admired and cultivated for many centuries. Confucius said “--- the acquaintance of good men is like entering a room full of fragrant orchids”.

More than a thousand years ago another Chinese poet and flower lover wrote four lines about orchids that might be the basic rules for the care of orchids today.

*“In spring don’t put them out of doors,
In summer don’t expose to too much sun,
In autumn don’t keep them too dry,
In winter don’t keep them too cold.”*

The Greeks gave the orchids the name we use today. They thought the bulbs of a favorite plant resembled testicles and they gave that plant its name, *orchis*.

Orchis was also a person from Greek mythology. He --- Orchis --- was the son of a satyr and a nymph. Bacchus killed him for trifling with one of Bacchus’ priestesses.

The satyr interceded with Bacchus for his son’s sake and Orchis was restored to life to become the very flower that bears his name. How much more romance do you want?

The linkage of orchids to romance continued in an even earthier manner. The ancients thought that orchids grew spontaneously where wild animals had been mating!

M. Grieve ("An Orchid Herbal", www.Biologica.com) speaks of the alleged erotic qualities of the fresh tubers that were not only used as a love potion, they were the food of the Satyrs.

The decoction of the withered tubers, however, had the opposite and depressing effect.

Grieve also cites their use in the form of poultice to be applied to the site of the "King's evil" (scrofula, a lesion of tuberculosis). And who knows ---perhaps they contained a then unrecognized antibiotic!

In a lighter vein, Grieve notes that in Dorset a particular variety of orchis is known as "Granfer Giggles".



Man has eaten orchids in a variety of forms for centuries.

Salep, made from the roots of certain varieties of the genus *Orchis* that grow in southeastern Europe, Turkey and the Middle East has been used as the basis for a pudding --- and as the Aztecs did, as a glue as well. One has to wonder what the puddings tasted like.

In Turkey it was once the base of a popular confection that is much like ice cream. Many natives of the region still recall the delicious treat, "Fox Testicle Ice Cream".

This "ice cream" was called after the Arabic word for the plant itself, *Sahlep*, freely translated as "Fox Testicles", because the withered tubers do resemble that bit of lupine anatomy.

Charles Lamb wrote of a popular concoction from a "Salopian Shop" on Fleet Street in London. It was served as part of a hearty breakfast for a chimney sweep, but there is no mention of its erotic

effects. The Salep was imported, but similar plants do grow widely in England.

The Spotted Orchis has “tubers” that are forked into two or three finger-like lobes. The plant is mentioned by Shakespeare in Hamlet (V, vii).

Telling of Ophelia’s death, the Queen says:

*“There with fantastic garlands did she come
Of crowsfeet, nettles, daisies and long purples
That liberal shepherds do give a grosser name,
But our cold maids do dead men’s fingers call them ---”*

When Hiram Bingham discovered the ancient hidden city of Machu Picchu in the high Andes of Peru, he found orchids among the Incan ruins.

The Aztecs knew many orchids and, like the Salep, used them for many purposes from tonics and flavoring to glues.

We still use other varieties of orchids as foods today. Vanilla comes from the dried seed pods of Vanilla, a native American vine-like orchid plant.

My wife, Nancy, has even tossed pieces of an orchid blossom’s petals into a mixed green salad. If you follow suit, Cattleya trianae is the one to use. That is out of bounds for me. It makes me feel like a cannibal!

It’s probably better, however, that you not try orchid salads. Some varieties in the Oncidium (“the dancing ladies”) family are said to contain toxins.



The present popularity of orchid flowers began perhaps three hundred years ago when English explorers started to carry back to England from South and Central America a few exotic flowers. In the early 1800’s one shipment of flowers to William Cattley was packed in a protective layer of dried vegetable material.

Cattley was intrigued with the packing and tried to grow it. The result --- you guessed it --- the dried stuff produced the spectacular blossoms of those flowering beauties that soon were enchanting the Western world,

The magnificent plants that bloomed from the “throw away” packing material were named after him. The genus *Cattleya* is now that group of special flowers associated for decades with glamour and a corsage on a mink coat.

What an imagination William Cattleya must have had! Can you see yourself even thinking about trying to grow the packing material around a shipment of plants, packing material that had been at sea for several months? Have you ever tried to grow plastic popcorn packing?

This little tale illustrates how tough members of the Cattleya tribe are. Even today they survive shipment by air and sea and, at times, dehydration, fumigation and delays at ports of entry that would forever end the life of most popular plants!

In South and Central America, first the jungles and then the more mountainous regions were soon ravaged as millions of plants were torn from their homes and carried back to Europe.

From the jungles came the *Cattleyas* and *Laelias* and other members of the *Cattleya Alliance*; from the mountains came the *Oncidiums*, *Miltonias* and *Odontoglossums* and their many cousins.

Similar harvesting of the orchids of the jungles, islands and mountains of southeastern Asia brought to the Western world the magnificent *Phalaenopsis* and *Vanda* tribes. *Cymbidiums* came from the cooler upland parts of India and Assam.

There was fierce competition among orchid hunters. It is likely that more than a few rival orchid seekers were killed to preserve the truth about the exact locations of special plants.

These plants were accustomed in the wilds to modest moisture, moderate temperatures and free flow of air. Sad to say, however,

misguided attempts to reproduce what was thought to be their native “tropical” environment in closed and humid “hot houses” resulted in the death of thousands and thousand of plants. The growing of orchids earned a reputation for extreme difficulty.



Oddities Among our Orchid Friends

When orchid lovers get carried away in their enthusiasms, they begin to find charm in the many species that one would hardly recognize as orchids. One species, *Polyrrhiza lindenii*, has recently piqued the public’s interest because of its role in the book “**The Orchid Thief**”, by Susan Orlean.

That flower, known colloquially as the ghost orchid, is probably the best known of a series of orchids that have substantially no leaves or bulbs but only roots (I ain’t got no body?). Instead, the spike of one or two pale white flowers rises from the core of a tangled nest of roots.

Orchids come in all sizes, from flower spikes ten feet tall to miniatures with flowers only a few millimeters in size. All colors are represented, although blue is uncommon.

The classical picture of three sepals, two petals, and a specialized lip becomes distorted in some plants to such a degree that it takes considerable imagination to recognize it as an orchid.

Substantially every climate has its own native orchids. Alaska has more native varieties than does California. **There are more orchids native to that part of the world north of the Arctic Circle than are *native* to Hawaii.**

The Orchid Isles, as the Hawaiian Islands have been styled, have only a handful of undistinguished flowers that are truly indigenous. The climate is ideal and many varieties grow in the full sun. The wonderful flowers one finds in the Islands are imports, even as you and I.

None the less, the last time I was in Waikiki, I did find wild volunteers growing along the edge of the sidewalks! (orchids, that is!)

The Spanish explorers in Mexico found a flower they called the Holy Ghost orchid, seeing in the structure of the lip an image of the religious symbol, a dove. This plant, *Peristeria elata*. is the national flower of Panama.

***One of amous for blooming the first week in May -
-- coinciding with the showiest of the Mexican
orchids, Laelia majalis, is f a famous day in
Mexico's history, Cinco de Mayo.***

Botanists also call it *Laelia grandis*, but the popular name is "Flor de Mayo". It grows in full Mexican sunshine. I could make mine bloom only when I exposed it all year long to the full sun of Los Angeles.



Orchid Hybrids

Natural hybrids between species were first recognized in the late 1700's. It is likely that the variation seen in some species is in fact due to natural hybridization as well as to changes brought about by minor mutations.

True to the superficially strict moral code of the 18th century, the whole idea of cross pollination was thought by early botanists to be somewhat immoral. Hybrids were regarded as an offense against "the infinite purity of nature".

Man, however, does love to tamper with nature, and artificial hybridization among the orchids was inevitable. The first hybrid known to us was made by John Dominy, a cross between *Calanthe masuca* and *Calanthe furcata*.

The famous taxonomist and botanist Lindley is described as having said with regard to this first man-made hybrid, "*You will drive the botanists mad!*"



Growing Orchids from Seed

The orchid seed, smaller than the comma in this paragraph, is truly a seed and not a tiny immature plantlet as is the case with beans and peas, for instance. In nature, it has a pretty poor chance of surviving. As a happy guess, probably no more than one in a billion seeds survives to maturity.

Growing orchids from seed at first was a trying and not very successful endeavor. Seed was often sown on the surface of *Osmunda* in which a mature plant was already growing. ("Osmunda" consists of the roots of the fern, *Osmunda cinnamomea*, at one time the common material in which orchids were grown.)

Many seedlings were killed due to infection by unwanted and unfriendly fungus or bacterial growth.

The process known as the "mycorrhizal phenomenon" occurs almost universally in the plant world. It consists of the growth various fungi, (Mycorrhiza) on the surface of plants and their roots. Dr. Lewis Knudsen of Cornell University recognized that this phenomenon was probably involved in the germination and growth of orchid seedlings.

In the years shortly after World War I, Dr. Knudsen identified the substances produced by a special friendly fungus, substances that were necessary for the successful germination and growth of the delicate seedlings.

He was able to duplicate the simple chemical nature of these substances that the seeds needed. He then grew the seeds successfully on sterile agar that contained these essentials. Thus was made possible modern orchid culture and hybridization.

Orchid seedlings are grown today in a sterile environment (on agar, in test tubes or glass flasks or bottles) until they are old enough to

withstand the unwanted varieties of fungus and bacteria.

It was shortly after World War II that commercial flower growers began to produce orchids in large numbers. Although the great British and French growers had long been active, the commercial growing of orchids in America developed rapidly after World War II. By 1945, E. A. White was able to list dozens of vigorous commercial establishments in the United States, England, Belgium and France.

In California, Armacost and Royston had been producing orchids for thirty years. In the mid forties the oil magnate, Samuel B. Mosher, brought from Europe the best Cymbidiums he could find and established his great orchid houses in Santa Barbara. Mosher is quoted apocryphally to the effect that, “---given an acre of oil wells or an acre of orchids”, he would choose orchids.



Did Genghis Khan ride through fields of orchids?

Could be! The oriental peoples have known and loved orchids for thousands of years. A more suitable image to remember than Genghis Khan might be that of a distinguished Japanese gentleman in his oriental garden enjoying his orchids.

Did the Minotaur feast on wild orchids?

Who knows? (No, no one ever really asked me this one!) But years ago I looked down and found myself standing on a tiny native orchid plant, probably a variety of *Orchis*, while sightseeing on the terraces of the Palace of King Minos in Crete. Sorry, I don't think it survived.

*Did Izaak Walton cast his line for trout
from a field of wild orchids?*

Possibly! (No, not this question either!) There are dozens of wild native orchids that grow near streams and bogs in England where Walton might well have been. This topographical relationship of *terrestrial* orchids to watercourses leads to many varieties being called “bog” plants in one way or another. This is quite in contrast to the nature of the epiphytes that are more commonly grown.

One day in the Wind River Wilderness in Wyoming I was on a little spit of land trying to outsmart a fish. I looked down and realized I was standing in a sea of beautiful, but tiny, perfect white orchids, twenty or so flowers on foot tall stems of hundreds of plants.

Along the trails at the foot of the Grand Tetons in Wyoming, you will see --- if you are looking for them --- reddish brown spikes of tiny orchids, varieties of the Coral Root orchids that contain no chlorophyll but manage to live on the dead plant material in which they grow.



Orchid blossoms are not just transiently exotic and beautiful; they are long lasting as well. ***A dozen plants, chosen to bloom in different seasons, will provide a spectrum of beauty and color the year round, and for years to come!***

An orchid develops an enchanting personality under your caring touch! They require much less of your time than do other garden favorites. Glamorous specimens thrive near a fairly bright window, moderate humidity and movement of fresh air in your own home.

For many more specific details for each variety of orchid, you can [click here](#) to order, “Caring for Your First Orchid”. Check out our website, www.caringfororchids.com. Then if you **ever** have other questions, email me anytime at info@caringfororchids.com. I enjoy sharing my passion!

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