

## Quick Facts About Cork

- . natural product
- . unique characteristics
- . unparallel properties
- . environmentally friendly
- . renewable resource
- . steady supply
- . managed healthy forests

## What Is Cork

Cork is the outer bark of the cork oak tree. Scientifically the Latin name for the cork oak tree is *Quercus* (oak) *suber* (cork). This remarkable tree has a bark (suberose parenchyma) which is unique throughout the plant kingdom. The cork bark can be harvested from the tree allowing new bark to grow in its place without killing or damaging the trees. This makes every tree a renewable source of raw material. The cork is harvested (peeled) from each tree time after time. The first harvest of the cork bark occurs approximately 20 years after a sapling is planted. After each harvest the cork tree fully regenerates its precious bark and is harvested over and over again every 9 to 10 years until the tree is approximately 200 years old. At that time the aged tree is removed and two new saplings are planted in its place, ensuring the cork forest continues to flourish and expand. Additionally the cork oak tree also reproduces off-springs naturally by dropping acorns that seed themselves and eventually mature into productive full grown trees.

## Where Do Cork Trees Grow

The worlds main cork oak forests are found in Portugal, Spain, southern France, Italy, and North Africa. It is the micro climate and soil types of these regions that allow cork oaks to grow and flourish and serve as the primary source of raw material for the cork industry. Today more then half of the worlds cork raw material comes from Portugal. Although cork trees are also grown in limited amounts in several other areas in the world, only cork harvested from the Mediterranean region is of a quality suitable enough for the production of natural wine corks. An interesting example of this restricted regional growth phenomena occurred in California, USA. Some years ago an American entrepreneur imported cork oak saplings from Portugal and planted them in various locations throughout the state. He felt that since the climate of California was similar to that of Portugal, the trees would grow well in California and would eventually serve as the raw material source for the production of wine corks to Californian wineries. Although the trees did flourish there, and in fact many are still growing there today, the cork bark on the California trees actually turned to hard “woody” bark not acceptable for production use. It is clear that even small climatic and soil differences will not allow commercially viable cork oaks to be grown outside the traditional geographic areas. The precise rainfall, wind conditions, and soil of the Mediterranean region are required to allow cork forests to flourish.

## Forest Fires and the Cork Oak

Not only are cork oak trees important to the fauna and flora of the regions in

which they grow. And not only are the trees a source of renewable raw material for the cork industry. The cork oak trees are also self-preserving. Many large forest fires ravaged the Mediterranean regions over the years with thousands of hectares blackened by the blazes. Pine trees and olive groves, eucalyptus trees and even vineyards have been burned and destroyed taking years to recover, if at all. Cork oak forests have not been immune to these massive fires either. However, the cork bark on these trees acts as a natural protective shield against the hot Mediterranean sun and the salty and sandy winds blowing off the sea and over the dry arid lands. The blazing fires that scorch the lands and the trees usually do not destroy the cork oaks. Indeed they too get scorched, but Mother Nature blessed the cork oak trees with fire resistant bark protecting the trees from total destruction. Although the brush and fields around and beneath the trees as well as the leaves of the trees are consumed by forest fires, thanks to the protective cork bark, cork oaks generally survive the fires and return to full growth within a short time. Nothing greater could highlight the insulating durability of cork and its protective qualities .

### How Is Cork Harvested

Cork harvesting is the process of removing the bark off the cork tree. This is an extremely delicate operation made to look easy by the expertise of the cork harvesters. These experienced individuals use a machete to slice the bark into



sections (the larger the section the better) and then they use a metal wedge to peel these sections from the trees. Although this is very strenuous work in itself, the harvesters need to take great care not to damage the very thin skin-like membrane which is found between the bark and the inner trunks of each tree. If this membrane were to be damaged it would weaken and perhaps kill the tree. It is this membrane that provides the nourishment to the cork trees. To register the harvest date and to ensure trees are not harvested again before the allowable nine years pass, after the bark is harvested from the trees the last number of the year in which the tree was last harvested is painted onto each tree (for example, if a tree was harvested in 2001, as shown in the picture, then the number 1 would be painted on the tree). This provides the control and assurance to both the forest owners and the environmental authorities that trees are not harvested before the ninth year following each harvest. This, among other cork forestry regulations, keep the cork trees in good health and producing good quality cork.

Every tree, therefore, is a source of renewed raw material. The cork is cut



from the same trees time and time again. This goes on for generation after generation for some 200 years. A tree in its prime at 80 years old can yield 440 lbs (200 kg). This is sufficient raw material to produce approximately 25,000 natural wine corks. Although most cork oak trees are just slightly larger than olive trees there are certainly exceptions. The world record was set in 1889 by a cork oak in Portugal which yielded no less than 3,870 lbs (1755 kg) of cork in one harvest.

### **Protection of Cork Trees**

Cork forests are carefully monitored and cultivated. Contrary to some beliefs and rumors, the health and sustainability of the cork oak is good and strong. In fact there are more cork trees today than there were some ten or fifteen years ago. It is true that some of the harvests passed through a few difficult years due to mismanagement of the forests in Portugal during several years in the 1970's. It was a time of political upheaval in that country and after the 1974 revolution in Portugal many of the large cork forest holdings were nationalized by the new leftist government. In its flawed wisdom, the new government divided the forests into smaller allotments and appointed loyalist farmers sympathetic to their communal philosophies to look after a particular section of land. These appointed and new landowners knew nothing of the requirements of good forest management and under their enforced watch the quality and yields of the cork became seriously strained. Fortunately the forests were eventually returned to the rightful owners but not before the damage was done. It took two full harvests (18 to 20 years) and a lot of repairs through proper forest management before the trees fully recovered their healthy yields. Today there are stringent cork forestry rules and regulations firmly in place and with Portugal a solid member of the European Union the political turmoil of the past will not be repeated.