

# The myth and magic of truffles



The French, of course, claim the first truffle! The French Black or Perigord Truffle. Legend has it that an old pig, well past its use-by date, was allowed one more walk in the forest before despatch, and found a black fruit in the ground. The swineherd tried to wrest it from her but she ate it. Suitors for the sow subsequently appeared from everywhere and fell into an amatory frenzy, as pigs do, which led in turn to many piglets. These piglets greatly improved the fortune of the house, so the pig was brought to the forest every winter to find truffles and eat them, with the same result. Now the swineherd, whose union had not been blessed with children, sought out his own truffles and took some home to his wife. Every year thereafter his wife produced a baby boy, thirteen in all and more than enough to attract the landlord's attention. The landlord told the King and the rest is history!

The remains of varying species of truffle have been found by archaeologists in stone-age middens and yet the truffle continues to be somewhat of a mystery after thousands of years of consumption.

The first recorded account of truffles is by the ancient Greeks who loved and prized them. Aristotle declared them an aphrodisiac and Pythagoras agreed. Theophrastus, a disciple of Plato and Aristotle wrote about them and assumed they were caused by lightning and thunder. The Greeks were puzzled by their unexpected appearance, their apparent lack of support for growth and assumed them to be seedlings of the Gods, warts on the earth's skin, the infant sons of sorcerers, the offspring of witches.

For the Romans they were simply 'earth fruit', *Tuber terrae*, but they could not get enough of them. Lucullus, Rome's most lavish party thrower, fed them to his guests when they could eat no more flamingo tongues or peacock brains! Marcus Aurelius ate truffle on his physician's advice, to improve his bedroom performance, but was warned that over indulgence would bring on melancholia. Apicius is on record, providing the first practical recipes. Pliny, the scribe who documented the destruction of Pompeii, wrote about dark deeds in the truffle trade even then, where a truffle trader pressed a coin into a truffle to increase its weight, which broke the tooth of the Minister for Justice who then proceeded to punish dishonesty in the market. Juvenal, a playwright and satirist, was the scourge of Roman politicians and used truffle as an indicator of decadence. To depict a worthless character to his audience, he simply fed them a plate of truffles in his plays.

There are references to truffles in Islam - and it is narrated in *Hadith* - that Muhamad said "Truffles are (a kind of) 'Manna' which Allah (God), the Exalted the Majestic, sent to the people of Israel through [Moses], and its juice is a medicine for the eyes." : *Sahih Muslim, Book 23, Chapter 27*.

The church of the middle ages was outraged by attention to truffles, a thing that was black, grew underground, had no visible support system, could not be logically explained, was found in the dead of winter when everything else was either dormant or hibernating, developed fairy rings or burned brules around trees, yet had an irresistible aroma and was considered an aphrodisiac. Dangerous stuff indeed! The stuff of sorcerers. Sermons were preached against it from the pulpit.

Truffles returned to favour in the Renaissance with the church writing about them in the 15<sup>th</sup> century in a volume called '*Of Permissible Pleasures*' and it immediately returned to the tables of the wealthy. Rasputin recommended truffles to the Tsar as a blood thickener and to improve the Imperial

bloodline. Napoleon ate truffle for strength in battle, not only on the field but in bed with his fiery Josephine.

Alexander Dumas said that "to tell the story of the truffle is to tell the history of world civilisation". In his *Grand Dictionary of Cuisine* he wrote, "The most learned of men have been questioned as to the nature of this tuber and, after two thousand years of argument and discussion, their answer is the same as it was on the first day: we do not know. The truffles themselves have been interrogated and have answered simply: eat us and praise the Lord"

The French writer Brillat-Savarin in his 1825 book '*The Physiology of Taste: or Meditation on Transcendental Gastronomy*' said 'the truffle is not a positive Aphrodisiac, but it may under certain circumstances render women more affectionate and men more amiable'

The Italians favour their white truffle, *Tuber Magnatum* over the black Perigord truffle, *Tuber Melanosporum*, but the chefs use them according to territory, looking to Piedmont for recipes for the autumn fruiting white and Umbria for recipes for the winter fruiting black.

Rossini, who loved truffles and has given his name to the famous truffle dish, Tournedos Rossini, considered the greatest delicacy was truffled turkey. "I have wept three times in my life," Rossini admitted. "Once when my first opera failed. Once again, the first time I heard Paganini play the violin. And once when a truffled turkey fell overboard at a boating picnic." While on the subject of musicians, the black truffle has been referred to as the Mozart of truffles!

There are many different varieties of truffle but we will focus on the black or Perigord truffle (*Tuber melanosporum*), as currently grown in the northern hemisphere (Europe and America), and more recently being cultivated in Australia, New Zealand, South Africa and Chile. Truffle growing in the southern hemisphere was started in New Zealand in the late 1980s as a government initiative and was quickly followed by work in Tasmania. The industry in Chile and in South Africa is in its very early stages.

The major attraction of growing truffles in the southern hemisphere is to supply the ready established markets of Europe and America, during their off season, and to supply the rising markets of Southeast Asia. A big responsibility of the Association is to see the market for truffles is reliably supplied with high quality produce that will compete with other international suppliers. It is also our objective to grow the market in Australia, which has a recent history of enthusiastically embracing new foods.

Truffles are a fungus and grow under the ground as a result of a symbiotic relationship with the roots of particular trees (for example oaks and hazelnuts) infected with the appropriate mycorrhiza (literally, fungus root). While they were originally confined to the wild, the past century has seen considerable research, particularly in France, in cultivating them as a domestic crop. The truffles form in summer and slowly mature during autumn and are ready to harvest in winter. They can be found breaking the surface of the ground or down to 200 millimetres deep and are best located by a trained dog, from the aroma emitted when ripe. The truffle then has to be assessed by a trained human nose to determine whether it is truly 'ripe' or should be left in the ground for a few days or a week before being harvested.

It is interesting that until very recently it was regarded as poor mans food in Spain, famine food. This could be a hangover from the earlier view of the Church, from the fact that they were loved by the conquering Moors, and were found and eaten by pigs. All considered good reasons to stay away from them! The name they have for them is *criadillas de tierra*, literally earth testicles. More recently with the decline of the French crop and the attractive price across the border, they are not regarded with so much suspicion.

The aroma has been isolated by chemists and while it has up to eighty components, the 9 primary chemical were isolated and now fool everyone. It is marketed as 'Truffle Aroma' and is the basis of all truffle oils. There has also been a lot of work done on electronic instruments to sniff truffles and identify them by the aroma. This might help also with quality issues in the future.

### What does it taste like?

Some say that if you hold your nose, you will taste nothing. Like many exotic flavours, it can be an acquired taste. And there is the confusion of distinguishing between taste and aroma. Taste on the tongue is the usual sweet, sour, bitter, salty and "umami" (MSG – savoury), but the nose is much more discriminatory. Thousands of notes, to a trained nose. Again, Gareth Renowden; The aroma of *T. melanosporum* is musty and sweet, a very intense mushroom smell overlaid with other notes, especially what wine tasters call "forest floor". It cooperates with the flavours in food enhancing and intensifying them. A steak with truffle sauce becomes more meaty, eggs are transformed into a gourmet item, and every aspect of the meal becomes more satisfying.

### What about growing truffles.

It may start as a dream, to grow the mystical, rare and delicate fungi with the most arresting aroma in the culinary world. Once you find your first truffle, this dream will eventually become an obsession and the passion will remain for the rest of your life.

It is the most fantastic journey to travel, opening doors to worlds that you would never think probable or possible, from ancient restaurants and traditional old farms and farmhouses across Europe, across Australia, both islands of NZ, and to the finest dining establishments around the world. As a grower, wherever you may travel, the truffle will also be part of those travels and in conversations truffles somehow always arise.

Truffles appear to grow in a wide variety of soils and climates within Australia, with production currently coming from the south of Western Australia, many areas in NSW, many parts of Victoria and of course, in Tasmania where the first truffle plantations were developed in the early 1990s.

There are also plantations in the ACT, South Australia and Queensland, however some of these plantations are yet to commence significant production.

Producing plantations in Australia have some common themes;

- Free draining soils
- Irrigation water (drought proofing)
- Hot summer temperatures
- Cold winter temperatures
- Dedicated farmers

The most important of all these is the last, as attention to detail is the key to production! There has been a lot of collaboration between local and overseas truffle growers, marketers and research scientists over the past decades, both internationally and in Australia. The current success that growers are enjoying is in part due to these people, but also to the good old Aussie tradition of careful observation and being prepared to have a go at growing these fungi under conditions that some experts would doubt possible.

There is now a vast array of management techniques available that have mitigated a lot of the growing problems and members of Australian Truffle Growers Association will be able to benefit from this collective knowledge. By being able to communicate with fellow growers locally and nationally and work through any problems new growers may encounter along their journey to production, the Association will grow to the benefit of members and to the benefit of the growing truffle industry.

Finally, growing truffles can be for simple personal pleasure or for profit and plantations might contain a few trees or thousands. While the warm and enthusiastic words above may be inspiring, it must be emphasised that truffle growing is not a 'get rich quick' project and should be viewed as a long term investment, that may or may not yield any returns, much the same as other agricultural pursuits.

*This was first compiled for a presentation from various sources by Wayne Haslam 2009*

The aroma of the truffle has defied explanation, but then it is very hard to describe the aroma of garlic and other exotic spices. As Gareth Renowden says in *The Truffle Book*, the scent can be pervasive. This may prompt the question "what do they smell like?" and elicit an answer "Old socks and sex." He goes on to say "Open the spice cupboard and take a deep sniff. Crush an unpeeled clove of garlic. Find some damp leaves and dig your fingers into the earth underneath (oak leaves are best). Then go for something floral – lilies for penetration, roses for sweetness."

