Taming the Truffle—

Over the last several decades, dozens of books on truffle cultivation have been published in Italian, French and Spanish. Much new has been learned about the topic during those decades. Now a definitive book in English has at last appeared, one that brings the science and art of cultivating truffles up to date in New Zealand, Ian Hall pioneered the establishment of truffle orchards, or truffières; since his retirement he has devoted full time to this activity. He established the program on a carefully designed, scientific footing and continues that approach today. Alessandra Zambonelli of the University of Bologna is among the foremost European researchers on truffle cultivation. Hall and Zambonelli combine their expertise and, with the participation of professional writer and editor Gordon Brown, reveal the state of the art and science of producing the “ultimate mushroom” in a splendidly interesting and informative way.

Not only is the prose a delight, but also the illustrations, all in color, are both informative and pleasing. The reader encounters a visual treat of many kinds of truffles and their spores and tissues, of truffières, of truffle hunters and their dogs, of truffle festivals, cooks and truffle dishes, and of truffily landscapes. Obviously much time and care went into that, and each photograph fulfills its destiny of being worth a thousand words. The authors begin with a narrative on the history and lore of truffles from the second century B.C. through the dark ages and medieval times into the “Golden Age of Truffles” initiated in the 14th century in Italy and France. Then they note the discovery of mycorrhizae by A. B. Frank, occasioned after he was commissioned by the King of Prussia to find out how to grow truffles. They take us through the decline of truffle production and its causes in early 20th century Europe to the emergence of truffle science and how it is applied to present day truffle production.

Next comes an extensive chapter on truffle identification, including not only the more popular edibles but also unpalatable and potentially, if mildly, toxic ones. Habitats of selected commercial species are discussed in detail; anyone who has a few acres and aspires to make a fortune growing truffles on them needs to study this and the following chapter on establishing a truffière. It is a tricky and uncertain business, at least when done outside the normal range and habitats of the species of interest, and each species differs from the others in those respects.

Establishing a truffière is not the end of the challenge. Sustaining productivity requires continuing vigilance in maintaining soil health, controlling host tree density and unwanted vegetation, and discouraging invasion by competing mycorrhizal fungi and insect truffle browsers. One curiously slighted topic, just mentioned offhand at the end of a single sentence, is the harvest of truffles by mycophagous mammals. In North America, squirrels and assorted other rodents are skilled and voracious truffle enthusiasts. Perhaps no proven control methods have been developed, but some truffle growers use poison baits during the truffle fruiting season, a practice that may be illegal in some areas. I have visited truffières in Australia that have electrified mesh fences to keep out small mycophagist marsupials and rodents, outside of which are three electric wires strategically placed to discourage wombats from crashing through or digging under the mesh. Mice can also gnaw at the bark of young host trees in spring when the sap is rising; stems may need to be wrapped in a gnaw-resistant material where that is a problem.

If all goes according to plan, the owner of a successful truffière may have a first harvest sometime between five and ten years after planting. Outside of areas where the Périgord and other cultivated truffles occur naturally, the longer times seem more usual. The final chapter in Taming the Truffle deals with many topics: finding and harvesting the truffles, regulations governing harvest and sale in different countries, yields and prices, packaging and marketing, exporting, and more.

After the text come 13 appendices, including diverse but useful topics such as names of host and non-host tree and shrub species for various truffle species, common names of truffles and host plants in four languages, production of Périgord truffles in France and Spain in recent years, climatic data for known truffle-producing areas around the world, and chemical characteristics of various fertilizers. For reasons not obvious to me, the list of references is not keyed to their use in the text. Chapter endnotes could have accomplished this without interrupting the flow of the text. Instead, we are given a website to consult for that purpose, but we are told that web information is constantly changing. If we don't find what we need from the cited website, "go to the home page and try the search option if there is one," and if that fails, do a Google search. I have never seen such advice in an otherwise excellent book, and I hope never to see it again.

That said, I return to my evaluation that this book is outstanding, a must for anyone interested in, planning to establish, or already managing a truffière.

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A recent article in the UK Financial Times Magazine follows the truffle exploits of Joyce and her dog Maxwell in their truffle orchard near Edinburgh with Dr. Paul Thomas: "In the field with Joyce and Maxwell is Paul Thomas, a scientist who has made the study of this elusive fungus his life’s work, and the growing of them his business. Thomas is not the first person to recognize the truffle’s commercial potential."