



THE TRUFFLE & WINE CO

MANJIMUP ~ WESTERN AUSTRALIA



TRUFFLE BUSINESS – EDITION 01 – JANUARY 2017

Welcome to...

The Truffle Business

Chairman's Welcome

Alf Salter - Chairman, The Truffle & Wine Co.

Welcome to our first quarterly newsletter, "Truffle Business". Our company's objective is to work with other growers to build a profitable and sustainable Australian truffle industry by sharing factual information and experience.

Any good business knows that its greatest asset is its staff and so we will also be giving you the opportunity to learn more about our management team.

It's this great team that has allowed us to become the largest single producer of Australian black winter truffle in the world. As a leading marketer of such a fantastic horticultural export, The Truffle & Wine Co. will be sharing



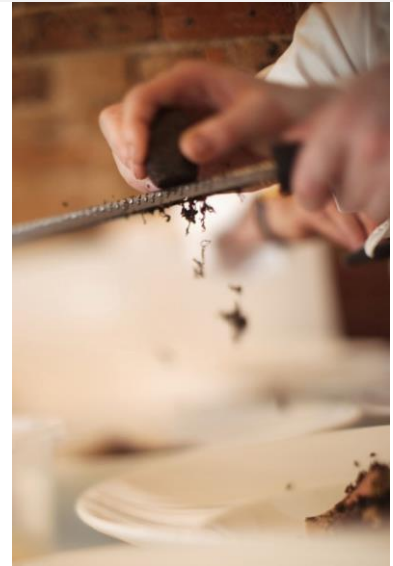
with you the expertise we have gained over the 19 years we have been conducting our R&D program. For the past 4 years we have sold 3-4,000kg per year and spent over \$2million on marketing and market development.

If you grow truffles then you'll know that it's a tough grind, requiring tenacity, patience and adaptability; as well as:

- The right knowledge
- Good horticulture
- Astute financial management
- Adequate capital

We encourage you to use this newsletter and the information contained within it to your advantage. Australian truffles are grown over a wide range of variable soil types and climates and whilst our production experience is specific to South West WA we believe we have experience that you and your business can benefit from.

We welcome your feedback by email cassandra@twc.com.au



Monitor Truffle Rot to Recoup Lost Yield

Janet Paterson - Research, Development & Engagement Manager

The old saying 'you can't manage what you don't measure' is particularly true for truffle rot. For the past decade, The Truffle and Wine Co. has measured the amount and location of all rotten truffle each season. This information has then been used to inform our annual research and farm management programs.

Truffles left exposed on the soil surface are also prone to rot due to cracking, insect damage and direct attack by fungal pathogens.

Cultivation aerates the soil, reducing rot levels and driving truffles deeper where they are more protected from the elements and pests such as insects, slugs and fungal pathogens.

By measuring the amount of rot produced each season we can trigger management changes that keep the rot level low. Over the years this approach has generated hundreds of thousands of dollars in yield and quality gains.

Tillage significantly lowered the rot level of buried truffles. However, surface-exposed truffles in tilled soils suffered the same level of rot as those in the uncultivated treatment.

Truffle rot became a serious issue as our production increased, with up to half our yield lost to rot in the early years. A concerted research program to tackle the rot problem saw our rot levels drop to well below 20% of total production. Some years it has been as low as 10%.

Rot is a function of soil aeration and truffle location within the soil profile. Truffles need a lot of oxygen to grow – many times more than other underground crops like potatoes. Without oxygen the truffle starts to die and rot.

Soil compaction and water-logging reduce the amount of oxygen in the soil resulting in more truffle rot.

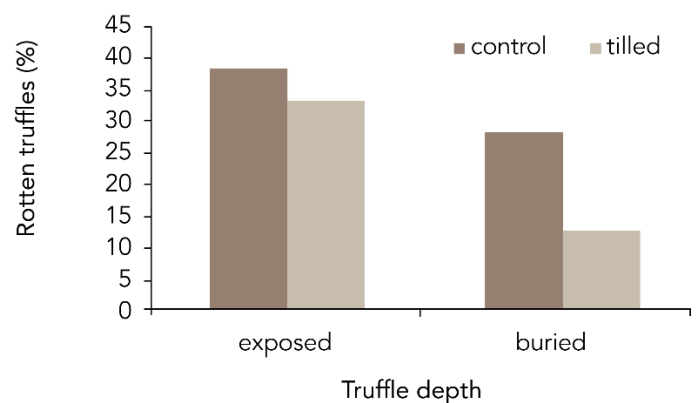


Figure 1. Impact of cultivation on rot levels in exposed vs buried truffles. (Data courtesy of Dr Harry Eslick)

For more information on managing rot contact:
Dr Janet Paterson
sciscribe@wn.com.au



Our Unsung Heroes – Human & Dog!

There is nothing like a cold, wet winter's morning to kill the romance of truffle hunting for most of us! Our Hunt Manager, Adrian Mielke and his partner Katie Boyer love that weather and pack up their 5 Labradors in May and travel from the Central Highlands of NSW to Manjimup each year for the 14 weeks of truffle season.

Local staff members, Shane Downie and Debra McLaren, who each have 2 dogs, make up the balance of our team, which last year harvested a total dirty yield of six tonnes. (As part of our R&D program we harvest all rotten truffle also).

Adrian probably has the distinction of having harvested more truffle than any other truffle hunter in the world. In his first 2 seasons with us in 2012 and 2013, Adrian harvested 3,870 kg himself with his dogs Zita, Greta, Lola and Raisin.

Over the past 5 years Katie and Adrian have harvested 11,450kg, with our other hunters harvesting about 9 tonnes over that period. Local hunter, Shane Downie was our top hunter in 2016.

Adrian is an accomplished dog trainer, having worked with Guide Dogs for the Blind for 11 years. He says the key to success in working with dogs is patience, discipline and a strong work ethic on the part of the handler and having a strong bond with a dog which, ideally, is very food driven.

Adrian will have several contract hunters this year and the capacity to harvest about 8 tonnes of truffle. If you want the best truffle hunter email Adrian on adrian@trufflehunters.com.au.



Clockwise from left:

Even in a crowd Raisin is focused on her handler



Katie trades in her old trowel

Human and dog, hard at work harvesting truffle



What happened to \$3000/kg?

The realities of truffle processing and distribution

Michael Lowe, General Manager

The \$3000/kg price point that we see in the media, is the full retail price of Extra Class truffle.

In reality very few truffles are sold from farm to retail, the vast majority being sold to distributors who are in the best position to handle customs clearance and who will be paying less than half of the full retail price.

The distributor will sell to chefs and wholesalers and as shipping is far more cost effective in bulk, they will want to purchase orders of 10kg or more.

Not all truffle is Extra Class

Every truffière is different, and even different areas of the same truffière will vary significantly with the size, shape, quality and damage (insect, rot) of the truffle that is harvested.

Typically from 1kg of harvested truffle, 30% will be rotten and insect damaged, another 30% will be whole truffle (Extra Class and First Class) and the remaining 40% will be pieces, trim and peelings.

All told a typical healthy truffière might achieve an average sale price of \$950/kg for saleable truffle and less than \$700 for each kg harvested, when rot and insect damage is taken into account.

Dollars evaporating

Truffles lose moisture at an eye-watering rate after harvest. There are a lot of variables involved in moisture loss, however the average loss is approximately 5% from harvest, to delivery, to a restaurant in Paris or New York.



From top:
Truffle packaged and ready for shipment from our Manjimup warehouse;
Grading and cooling room;
Truffles washed and ready for grading

During transport, truffles will lose some moisture to absorbent pads in the packaging, so to comply with Australian measurement legislation and customer expectation we need to over pack our bags by up to 3%. Moisture is also lost whilst truffle is kept in cool rooms between being washed and packaged. So the quicker you can grade, pack and deliver, the less moisture will be the lost.

Hunting, harvesting, cleaning, grading & packing

Getting truffle from the ground to the package is an extremely labour intensive process and each kilogram of truffle takes many hours and requires specialised skills.

It is important that dogs are well trained to avoid immature truffle being harvested or the peridium being scratched by an over zealous dog. Poorly washed truffle could result in quarantine issues at the country of destination, resulting in loss of the whole consignment.

Adherence to grading specifications is important in ensuring customers' expectations are met.

Quality control in every part of the process is critical to maintaining a good reputation as a supplier of quality truffle. Small mistakes usually result in significant financial loss and loss of reputation and customers.

Getting it to the customer

90% of Australian produced truffle is exported and being highly perishable, must be air freighted with care to their destination. The minimum cost of an international shipment is approximately \$350, however economies of scale significantly reduce our average packaging and freight costs.

International freight costs are a significant barrier for many small growers and small customers. Some countries also require a phytosanitary certificate to be produced which start at around \$70 per shipment and some charge import duties of up to 30%. Of course small domestic shipments can be sent relatively cheaply by courier however there are risks as these are not refrigerated. We have a daily, consolidated shipment from Manjimup to Perth airport.

We are here to help

As with most things the devil is in the detail. We hope the above has given a very brief overview of what is involved in getting truffles from the paddock to the end customer. If you want more info, email us at cassandra@twc.com.au.

Marketing Australian Truffles



If you produce truffles in Australia, you will undoubtedly be exporting your truffles and will need to become familiar with the international truffle market.

Why are you an exporter? The Australian Market for black winter truffle (*Tuber Melanosporum*), is about 1,000kg per year. The total 2016 Australian harvest was about 8,000kg of truffle and nearly 90% was exported.

Selling overseas is a completely different business to selling in Australia:

- You require a distributor with a good distribution network within the country or region in which you are selling
- You need to establish trust – there are a lot of rogues in the international truffle business

summer menus to Australian black winter truffle.

Marketing is an essential component of business. Growers want and need to sell their truffles to see a return on their investment.

Our company spends about 15% of our total expenditure on marketing and market development, which represents 10% of sales revenue. These figures are likely to be many times greater for small producers as economies of scale are a significant factor in reducing cost per kilogram.

The Truffle & Wine Co. has an established distribution network through which we sell into more than 20 countries. Over the past 4 seasons we have sold over 12 tonnes of truffles and spent over \$2million on marketing and market development. We have established

- You need to be able to supply a reliable quantity every week
- There are costs for airfreight, customs clearance, import duties and phytosanitary documents in some countries, marketing and loss of weight in transit (typically about 3%)
- You have to be sure of getting paid and handling currency fluctuations
- Competition from other Australian growers and from European canned and frozen truffles and fresh *Tuber Aestivum* (summer or burgundy truffle) will increase as Australian production increases

Australian truffle is regarded as a winter product by chefs in the Northern Hemisphere. The availability of a “winter” product during their summer months is an exciting prospect but one that requires considerable promotional work to encourage chefs to adapt their

a strong brand with a reputation for quality and reliability.

We have markets for more truffles and are happy to talk with you about purchasing your crop for the 2017 season.



Alex Wilson, Senior Sales & Marketing Manager

alex@truffleandwine.com.au

Truffle Business

INFORMATION

EXPERIENCE

HELPING YOU SUCCEED

The Truffle & Wine Co.

T: +61 459 490 015

F: +61 8 9777 2820

PO Box 422, Manjimup WA 6258

W: www.truffleandwine.com.au