



# The Australian Truffle Industry Association Inc.

## Strategic Plan 2021 – 2026

Adopted March 2021

# Table of Contents

<b>President's Foreword</b>	Page 3
<b>Australian Truffle Industry Association (ATIA)</b>	Page 4
Our Principles	Page 6
Our Key Objectives	Page 6
Industry Snapshot	Page 7
ATIA Membership	Page 8
<b>The ATIA Strategic Plan 2021-2026</b>	Page 9
Challenges	Page 10
Opportunities	Page 10
Strategic Plan Alignment to Government Policy	Page 11
Industry Stakeholders	Page 12
<b>The Strategic Plan Framework</b>	Page 13
Research and Development	Page 14
Goals, Initiatives and Actions	Page 14
Goal 1: Improve Grower Operations	Page 15
Goal 2: Grow the Market	Page 16
Goal 3: Improve Governance and Coordination	Page 17
Research and Development	Page 18
<b>Addendum 1: Truffle Industry Analysis</b>	Page 19

## President's Foreword

The Australian truffle industry has established a reputation as world class in production, processing, and supply of high-quality truffles, to both domestic and international markets.

In less than three decades our industry has become the fourth largest producer in the world and projections are for two to three fold increases in truffle production in the next 10 years.

Success and growth bring new challenges. As the Australian industry continues its steady development, there are immediate, ongoing, and longer-term priorities to be addressed in a logical progression.

An evolving national direction is required so that the industry can meet the increasing expectations of buyers and consumers while maintaining a superior product, expanding market reach, and sustaining high dollar value.

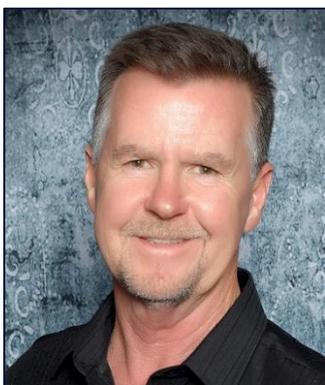
Despite Covid-19's impact during the initial phase of this plan, the industry has worked hard to adapt to the changed circumstances. The next few seasons will likely present a similar environment, as global communities and their economies take time to recover.

Other challenges, such as the changing climate, biosecurity risks, international market competition, food security, and consumer's desire for clean, green food and knowledge of provenance, all impact the industry.

ATIA is committed to working constructively with growers and exporters in meeting these challenges. Participation from all industry sectors to develop strategies for operating effectively in a changing economic environment is imperative.

ATIA will seek to engender a greater unity between industry stakeholders, recognising that the resilience and adaptation required, will come from collaboration, collective knowledge, and idea generation.

This strategic plan, for the next five years and beyond, outlines the priorities for the Australian Truffle Industry Association in meeting the challenges, supporting members and the greater truffle industry.



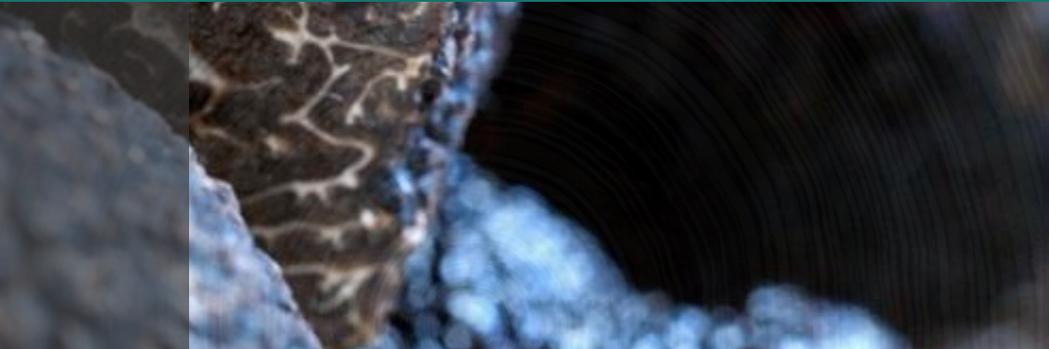
**Noel Fitzpatrick**

President, The Australian Truffle Industry Association, Inc.



# **Australian Truffle Industry Association (ATIA)**

**Incorporated under the Associations Incorporation Act, NSW**



## ***ATIA VISION***

*Our Vision is to be the world's most respected truffle industry  
and to make Australian truffle synonymous with  
superior quality and clean credentials.*



## Overview

The Australian Truffle Industry Association (*formerly Australian Truffle Growers Association Inc.*) was incorporated in 2006 and is recognised as the peak body representing the industry in Australia. The genesis of ATIA was to create a national body to foster industry development, knowledge sharing, communication and engagement with government and stakeholders.

The ATIA committee comprises eleven representatives as follows:

- South Australia (1)
- Western Australia (3)
- New South Wales and the ACT (3)
- Victoria (3)
- Tasmania (1)
- Queensland (1)

Committee members volunteer their time and experience. Collectively the committee is representative of the complete value chain from paddock to plate locally and internationally.

Truffle production is now established in all States and Territories of Australia except for the Northern Territory. In November 2020, ATIA had 192 members across the country.

### **ATIA MISSION**

*Our mission is to promote a collective culture of farmers, traders, and product makers, working productively and sustainably.*

- *Improving grower operations*
- *Growing the market for Australian truffle and truffle products*
- *Building effective partnerships*
- *Connecting with members*

# Our Principles

## Quality

Our consumers expect the highest quality and so do we. The Association is dedicated to attaining the highest quality in the work that we do, the Research and Development we engage in, and in the expertise we source. Quality in all aspects of our operations will be the mark of our reputation for the highest possible standards.

## Efficiency

In addition to quality, we must deliver value for money, we have a responsibility to do so for our members and the agencies we partner with. We must combine the best quality with the best value.

## Responsibility

We take responsibility for the decisions we make on behalf of the industry, our membership and our undertakings. We commit to tracking our progress and have set targets to do so.

## Mutuality

We base decisions on mutuality of benefit to our members and stakeholders. A mutual benefit is a shared benefit, and a shared benefit will endure.

# Our Key Objectives

- Represent all Australian growers as the peak body at State and Federal levels.
- Foster and encourage cohesion between growers and all industry stakeholders.
- Raise the profile of the industry and its products locally and globally.
- Support industry growth through critical research and development projects.
- Promote the development of national and international marketing initiatives.
- Continually engage government at State and Federal levels to ensure industry growth.
- Foster industry-wide biosecurity initiatives to ensure industry protection.
- Facilitate conferences, workshops, and industry networking events.



## Industry Snapshot

The first inoculated trees were planted in Tasmania in 1993. Australia's first black truffle was harvested in 1999. Since that time, Australia has become the world's fourth largest producer of the Périgord black truffle (*Tuber melanosporum*) after Spain, France, and Italy. The success of Australian truffle farming has been a combination of focused tree husbandry, expert nursery and seedling inoculation techniques, shared knowledge, soils largely devoid of potentially competitive fungi species, and collaboration with international academic institutions and grower organisations.

Currently, the major producing area for Australian truffles is the Southern Forests region in south west of Western Australia, which accounts for approximately 80% per cent of the national annual harvest. There is increasing production in Tasmania, Victoria, New South Wales, and ACT. A small number of farms in South Australia and southern Queensland have also commenced production.

Australian truffle farming is an emerging industry where production has increased almost three-fold between 2012 and 2018. Most of Australia's fresh truffle harvest is exported, with markets now established in more than 60 countries, including Asia, Europe, and the United States. Australian marketers continue to expand global acceptance and appreciation of Australian truffles, benefiting from the fresh, clean, quality product image of Australia.

In almost 30 years the Australian truffle industry has grown from a single truffle orchard in northern Tasmania to an estimated 300 plus orchards across all States and Territories except the Northern Territory. Industry estimations are that 25-30 per cent of plantings are currently productive with several older farms considered at peak production. Annual plantings are increasing, and production regions are expanding.

As more trees reach maturity and likely full production, there is the potential for a two- to three-fold increase in truffle production over the next 5-10 years. Recent national harvest estimates range between 10,000 to 14,000 kilograms annual yield. More than 90% of this production (saleable) is exported.

Australian grower demographics range from large companies with substantial plantings to small and medium size producers who join the industry to augment other income streams. Many of these growers have a strong focus on agri tourism activities.

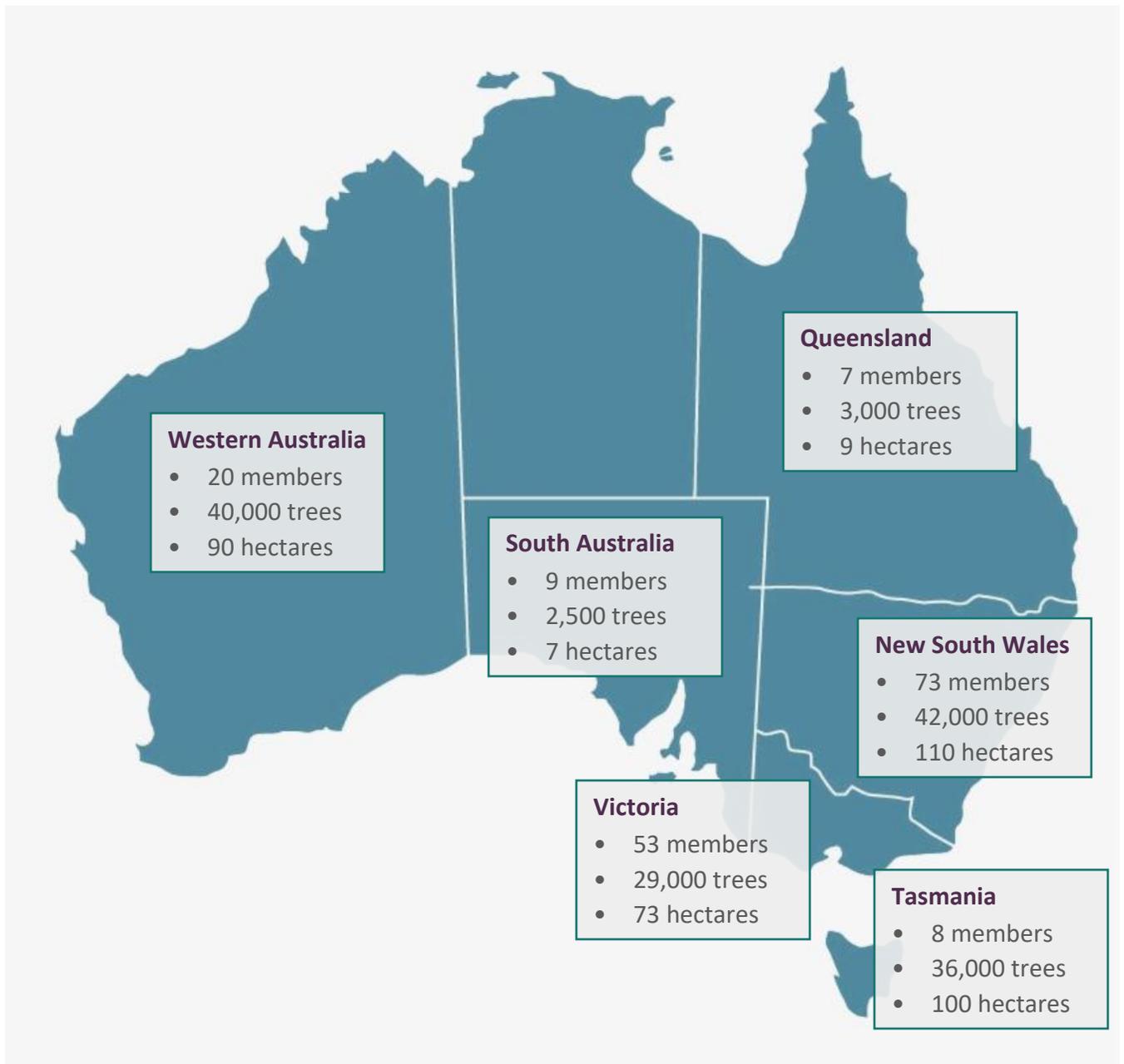
It is predicted that over 20,000 kg of truffle will be produced per year by 2026 and potentially 40,000 kg by 2030.



# ATIA Membership

Membership of the Association continues to grow steadily. ATIA memberships support the Association's vital work in moving the industry forward for all growers and value chain stakeholders.

## Membership Snapshot





# The ATIA Strategic Plan

## 2021-2026

### Foreword

A good strategy draws from the intent to set a clear vision and direction. It leads towards defined outcomes and must be dynamic, measurable, and continually evaluated.

This plan represents a splendid opportunity to develop a collective view for guiding everyone in the ATIA with an interest and role to play in working towards our common goals. We would urge all members to embrace and discuss our goals and work with us to translate our vision into action.

As the industry continues its expansion, we recognise the need to structure our activities to lead rather than react. This document represents our blue sky thinking. From here we can further structure our efforts within specific working documents such as an industry Marketing Plan.

## Challenges

As more farms are planted, young orchards begin producing and older orchards approach maturity, the inevitable increase in the supply of truffle needs to be met by an increase in demand to maintain a high value of our produce.

In attempting to balance supply and demand, being able to estimate the present and predict the future production and value of the Australian truffle industry accurately is increasingly significant yet remains difficult to achieve. The nature of current sales activities makes tracing truffle sales through numerous outlets and the full value chain problematic. Farmgate to consumer sales take many forms so that yield and total product value cannot be accurately determined.

Government bodies assess the growth of an industry via annual increases in its local value of production (LVP). For truffles, this LVP is currently derived from product export data collection (from the Australian Bureau of Statistics) with a factor applied to capture domestic sales. Presently the LVP is estimated between \$8 and \$9 million. The full value chain is a greater yet largely indeterminable figure.

The export price for truffles is to some extent underpinned by the international price of truffle, largely set by the higher volume northern hemisphere crop.

The value of this LVP for the industry impacts the level of government assistance available and impacts the potential liability of the industry in the case of an emergency plant pest incident. In crude terms, the higher the LVP, the lower the level of assistance, and the greater the potential liability. Significant funding will need to be identified and spent toward growing the market for Australian truffle.

## Opportunities

From the challenges outlined above, several opportunities arise. The creation of an industry advisory panel, comprising representatives of larger growers and exporters as well as smaller growers will provide a business-oriented focus on industry expansion, new market opportunities, and the branding of Australian truffles. Further Research and Development projects for new product development, extending the shelf life of fresh truffles and value-added products as well as projects looking to enhance our farming practice will add energy and excitement to truffles as a consumer product and a viable cropping option.

The Australian Truffle Industry Association is well placed to lead such a panel and be fully representative of truffle growers, traders, product producers and providers and associated industries.

In developing partnerships with government bodies as well as research organisations, the industry will be able to leverage the knowledge and experience of experts in identifying worthy R&D projects.

## Strategic Plan Alignment to Government Policy

The Association's endeavours and activities directed by our strategic plan are aligned with the Australian Government's agricultural procedures and legislation administered by The Department of Agriculture, Water, and the Environment (DAWE).

Our initiatives and associated outcomes have been developed based on the policies of both Federal and State agencies responsible for agricultural, food safety, import/export protocols and environmental regulation.

We have developed goals and strategies now allied with government directives on biosecurity, farming practices, food safety and traceability, on research analysis and advice to our growers' group, and on trade and market access.

Our constitution (rules of association) administered by the Associations Incorporation Act (NSW 2009 No. 7) regulate our procedures for acting in our members best interests, for good governance and reporting requirements.



# Industry Stakeholders

To promote our vision for the industry and implement the strategies and initiatives identified in this plan, ATIA will look to work in partnership with all truffle industry stakeholders (listed below):

## ATIA's current members

- ATIA is a member-led organisation.

## State and Territory truffle organisations

- Association representatives from each State and Territory.
- Truffle Producers Western Australia (TPWA)

## ATIA potential members

- Emerging growers, established producers, exporters, and other industry stakeholders.

## International, Federal, and State and Territory agencies

### Federal

- Department of Agriculture, Water, and the Environment (DAWE)
- AgriFutures Australia (AFA) (formerly Rural Industries Research and Development Corporation (RIRDC))
- Plant Health Australia (PHA) (plant biosecurity and custodians of the Emergency Plant Pest Response Deed (EPPRD))
- Nursery and Garden Industry Australia (NGIA)
- Australian Pesticides and Veterinary Medicine Authority (APVMA)

### State and Territory

- WA Department of Primary Industries and Regional Development (DPIRD)
- Department Primary Industries and Regions SA
- Department Primary Industries, Parks, Water and Environment TAS
- Department Primary Industries NSW
- Department Agriculture and Fisheries QLD
- Agriculture Victoria
- Department of Water and Environmental Regulation (DWER), WA
- ANU ACT
- Curtin University, WA
- University of New England, Armidale

## Value chain partners

- Trainers, handlers of truffle dogs, transporters, processors, input providers, investors, restaurateurs, retailers, and associated industries.

## Consumers

- National and international



# The Strategic Plan Framework

Success and growth bring new challenges

As the Australian industry continues its steady development, there are immediate, ongoing, and longer-term priorities to be addressed in a logical and pragmatic progression. A dynamic, evolving national direction is required so that the industry can stay well ahead of the curve when dealing with the environmental, economic, political, and competitive nature of the global industry.

ATIA has canvassed the truffle industry to identify immediate and ongoing needs and to gain consensus on how to achieve those goals. Within each goal several initiatives focus our efforts. Each initiative lays out specific, measurable, achievable, relevant, and timely (SMART) actions we can work on and track our progress against.

## Research and Development

Research and Development project opportunities can be found under their respective Goal initiatives. Securing ongoing funding for R&D projects must be a priority focus for ATIA.



## Goals, Initiatives, Actions and Outcomes

**IMPORTANT NOTE:** The committee has been careful not to over commit to initiatives, actions, and outcomes in this 5-year plan. It has been observed in the past that this practice can have negative results when too much is aspired to and hence not achieved over a given period. The committee believes that the initiatives below are achievable in the time frame and will make a significant difference in the progression of the Australian industry.

The goals are not listed in order of priority; collectively they form a ‘whole’ approach to our Mission. Research and Development initiatives to underpin the Plan are listed following the detail of the Goals.

1. Improve Grower Operations	2. Grow the Market	3. Governance and Coordination
<ul style="list-style-type: none"> <li>a. Biosecurity</li> <li>b. Truffle Culture &amp; Orchard Management</li> <li>c. Quality Control</li> <li>d. Sustainable Development</li> </ul>	<ul style="list-style-type: none"> <li>a. Benchmark the Industry.</li> <li>b. Plan for Market Expansion</li> </ul>	<ul style="list-style-type: none"> <li>a. Governance</li> <li>b. Alignments and Partnership</li> <li>c. Communication</li> </ul>

## Goal 1: Improve Grower Operations

Initiatives	Actions	Outcomes
<b>Biosecurity</b>	Work with State and Federal agencies and research bodies to map Australian farms	Produce a map of Australian truffières
	Progress biosecurity preparedness, including a biosecurity response plan, owner compensate format and a biosecurity levy process to combat and eradicate plant pest incursions	Create an industry response plan, an owner reimbursement process and implement a levy system
	Develop diagnostic protocols and contingency plans for truffle industry on-farm biosecurity	Training and information brochures circulated to the membership and the greater industry
	Develop national guidelines on truffle import with procedures for genetic identification	Identify a compatible protocol from other industry and implement
<b>Truffle culture and orchard management</b>	Facilitate the development and promotion of best practice for production to assist growers in improving farm productivity, yield quality and sustainability through education on all aspects of orchard management	Implement quality assurance procedures and information sheets/handbook on industry best practice
	Sponsor research into the phenology (life cycle) of truffle fungus	Optimise farming practices with results published and presented
	Monitor annual fungal development on host tree root systems, mycelial development in soils and microbial influence on fruit bodies.	Optimise farming practices with results published and presented
<b>Quality control</b>	Undertake risk assessment and develop best practice handling guidelines through the supply chain, from farm to consumer. Develop strategies to improve quality, safety and reduce fraud.	Education on food safety and implement HACCP procedures
	Support the development of an industry product traceability and provenance program.	Successful development of an industry product traceability/provenance program
<b>Sustainable Development</b>	Encourage growers to develop business plans for orchard management, irrigation management and operational costs and economic models to establish cost recovery, break event points and optimum production rates.	Compilation of grower's industry data/templates and examples available to membership through ATIA website
	Support the investigation into the sustainability of carbon neutral orchards and potential whole chain sustainability models	Supply literature and expertise links on sequestration and sustainability procedures

## Goal 2: Grow the Market

There is significant growth potential for Australian truffle sales in both national and international markets. Australian truffles are currently exported to many locations including the Asian nations, the United States and Europe. Emerging southern hemisphere truffle industries such as South America and South Africa will create strong competition for Australian truffle markets as they develop.

Initiatives	Actions	Outcomes
<b>Benchmark the industry</b>	Benchmark the industry via industry stocktake (areas planted, number of trees, species, truffle volumes and local value of product)	Establish a nation-wide orchard locator and methodologies for truffle sales reporting and valuation
	Access and compile Australian Bureau of Statistics data and analyse truffle industry export sales as part of annual industry metrics compilation	Present an annual interpretation of these data
	Complete a geographic area planted metric of the Australian truffle industry to identify truffle provenance	Present finding at the annual conference
<b>Plan for Market Expansion</b>	Establish an industry advisory panel to develop strategies for sustainable growth	Establish relevant industry stakeholder panel
	Assist industry to develop an internationally recognised brand for Australian truffles, and value-added truffle products, particularly in developing new Asian and Chinese markets.	Create Australian truffle awareness. Provide support and facilitation to industry players
	Foster research for processing and packaging technologies to expand Value Added product offerings and assist with the distribution and shelf-life of truffles.	Support to industry initiated and controlled R&D projects for value-adding
	Develop a better understanding of new and emerging overseas markets	Provide support and facilitation to industry players
	Develop a better understanding of the international competitive producers, particularly those in the southern hemisphere	Published findings
	Assist industry to develop marketing campaigns driven by consumer research to optimise the position of Australian truffles in existing and emerging domestic channels	Provide support and facilitation to industry players in research and campaign proposals.
	Work with state and territory agencies to promote the Australia truffle at regional and state events	Increased awareness and development of truffle culture within communities
	Promote the low impact truffle production has on the environment and convey positive stories to consumers	Increased product awareness at a local level

## Goal 3: Improve Governance and Coordination

ATIA strives to be a well-governed, progressive organisation that is recognised as the peak body for Australian truffles. We will track our progress to achieving our Goals through specific, measurable, achievable, relevant, and timely actions.

Initiatives	Actions	Outcomes
<b>Governance</b>	Conduct a review of the role of the ATIA to be representative of the truffle industry beyond the grower group	Complete review and present at annual conference for possible constitution modification.
	Review committee structure, duties, and areas of expertise	Publish a review of the structure on members area of the website
	Create a business plan pertaining to the potential role of a part-time CEO or similar for ATIA. Position to become self-funding	Increase funding activities, R&D opportunities, and stakeholder engagement.
	Review current and identify new revenue streams	Present at AGM and publish on the website
	Develop a risk management strategy for the ATIA	Publish risk management plan identifying risks and mitigation strategies.
<b>Alignments and Partnerships</b>	Develop a cohesive framework between the ATIA and the federal, state, and territory bodies	Liaison personnel identified and recorded
	Formation of a truffle industry RD&E reference panel	Personnel identified and panel established and active
	Develop industry-wide research, development, and marketing levies to fund the growth and security of the industry's future	Appropriate levies introduced or significant progress made toward the introduction of levies
	Support growers to have appropriate work safe practices and management procedures for staff and contractors	Production of booklet
<b>Communication</b>	Develop a communication plan for stakeholders, growers, supply chain partners, government agencies, service providers, consumers, and the community	Production of an accessible list of contacts including stakeholders, supply chain partners, government agencies, liaison officers service providers

## Research and Development

Most of the actions identified to address each goal and the associated initiatives rely on R&D that will be conducted across a variety of initiatives. Where appropriate these Research and Development initiatives, actions and outcomes are addressed separately below.

R&D	Actions	Outcomes
<b>Phenology</b>	Study the phenology (life cycle) of the truffle fungus to identify optimal soil management (moisture, pH levels, soil temperatures), pest and water control, and tree health.	Publish and present results
	Monitor annual fungal development on host tree root systems, mycelial development in soils and microbial influence on fruit bodies.	Publish and present results
	Study the effect that different environmental conditions have on the truffle growth, yield, and productivity	Publish and present results
<b>Environment</b>	Investigate biological and non-chemical pest control to supplement or replace chemical pest control	Publish and present results
	Investigate the effects climate change is having and will likely have on the industry	Publish and present results
	Investigate environmentally considerate management practices	Publish and present results
<b>Host Tree Husbandry</b>	Study yield performance of truffle trees treated with different nutrients, fertilisers, and microbe additions	Publish and present results
<b>Soil and Irrigation</b>	Study yield performance of truffle trees planted in a variety of soil types	Publish and present results
	Investigate various irrigation techniques and their effect on farm productivity, yield quality and sustainability	Publish and present results
<b>Pest and Disease</b>	Continue investigating systems for integrated pest management	Publish and present results



## Addendum 1: Truffle Industry Analysis

The following is an overview of the ATIA strengths, weaknesses, opportunities, and threats (SWOT).

### Strengths

- Recognised as the peak body for the truffle industry in Australia.
- Provides representation and advocates for all Australian truffle growers.
- Diverse industry experience within ATIA committee of management.
- Consistent growth in ATIA membership and participation.
- Productive relationships with AgriFutures and relevant government bodies and industry stakeholders.
- Annual conference with international speaker for knowledge sharing and industry networking.
- Providing presentations, education forums, workshops, and events for industry.
- Support industry exporters in their international marketing endeavors.
- Established National Validated Seedling Tree Evaluation Program (AVSTEP).
- Signatory to the Emergency Plant Pest Response Deed (EPPRD) under Plant Health Australia (PHA).
- Developing a biosecurity response plan with owner reimbursement costs and a levy process to combat and eradicate plant pest incursions.
- Partner and contributor to the national investigation of pests and diseases of truffles and their host trees.
- Understanding of existing major pest threats to the truffle industry throughout Australia and identified management practices to mitigate risks.
- Industry has procedures and processes for on-farm integrated pest management.

# Weaknesses

# Opportunities

- No defined strategy for developing and assisting industry in the expansion of international markets.
  - Limited internal funding to support research and development projects.
  - Reliance on funding from external sources to conduct research and development projects.
  - Lack of geographic location mapping of Australian truffle plantations.
  - Website requires improvement to consistently provide members with up-to-date information.
  - Lack of clear national guidelines on truffle import. No genetic identification / quality control of imports.
  - Liaison and cooperation between industry representative bodies and large growers needs improvement.
  - Defined strategy required to address the lack of industry wide alignment on truffle grading standards.
  - Limited understanding of the international competitive producers in the Southern Hemisphere.
  - Operational framework between ATIA and state and territory bodies require improvement.
- 

- Develop industry advisory panel to drive brand awareness and marketing of Australian truffles.
- Establish international marketing strategy to assist industry expansion.
- Assist industry to facilitate truffle markets in Asia with emphasis on China.
- Foster and support ongoing research projects including preferred soil microbiome, eliminating chemical use, biological pest and disease control, irrigation techniques and practices, life cycle of truffle fungus.
- Develop stronger links with relevant government bodies and stakeholders.
- Engage the National Traceability Framework to develop value chain traceability system for the industry.
- Present regular information for members on biosecurity measures and good farming practice.
- Work with Australian Bureau of Statistics to have accurate figures and analysis of the truffle industries export sales.
- Provision of better industry information and for value chain partners.
- Support development and implementation of on farm food handling standards and safety requirements.
- Support initiatives for new product development for value adding, agritourism and extending shelf life.
- Facilitate knowledge sharing around quality control and packaging.
- Support Australian based scientists to become specialists within the truffle industry.
- Develop program of state-based workshops and field days to showcase and stimulate industry.
- Encourage specialist dog handler's industry support organisations to participate more in truffle industry.

# Threats

- Biosecurity at all levels.
- Climate change effects on the whole industry.
- Variations in the grading system causes international misunderstanding of the grade of Australian truffle.
- No industry metric (measured figures (volume or value) of truffle industry) for future strategic planning.
- Oversupply in all markets potentially leading to price deflation.
- Lack of industry understanding around the cost of production.





# The Australian Truffle Industry Association Inc.

---

[www.truffleindustry.com.au](http://www.truffleindustry.com.au)

---