

Wildlife Trade Operation Proposal- Queen Ant Harvesting

1. Title and Introduction

1.1/1.2 Scientific and Common Names

Please refer to Attachment A, outlining the ant species subject to harvest, including common and scientific names, and the expected annual harvest quota which will not be exceeded.

1.3 Location of harvest

Harvest will be conducted on privately owned land [REDACTED]
Somerville Vic 3912.

1.4 Description of what is being harvested

Please refer to Attachment A for an outline of the species to be harvested. The harvest is of live adult queen ants which are newly mated.

1.5 Is the species protected under State or Federal legislation

Ants are non-listed invertebrates and are as such unprotected under Victorian State Legislation. Under Federal legislation the only protection to these species relates to the export of native wildlife, which this application seeks to satisfy.

No species listed under the EPBC Act as threatened (excluding the conservation dependent category) or listed as endangered, vulnerable or least concern under Victorian legislation will be harvested.

2. Statement of general goal/aims

The applicant has recently begun trading queen ants throughout Victoria as a personal hobby and has received strong overseas interest for the species of ants found. The goal of this application is to seek approval for a WTO to export queen ants internationally.

3. Harvest Details

3.1 Details of the area where harvesting is to take place

The area where harvesting will take place is as follows:

- 24 acres of heathy woodland type bush near Somerville, Victoria. (Refer to photograph in Attachment B)

3.2 Details of land ownership

The applicant privately owns the property.

3.3 Quantity intended to be harvested

Please refer to Attachment A which outlines the expected annual quota. This quota will not be exceeded; however, the actual harvest amount will vary depending on demand for queens.

3.4 Methods of harvesting and equipment to be used

All ants are harvested by hand by the applicant. This means that the harvesting is completely selective and only species outlined in Attachment A will be collected. Queen ants are either simply located visually and carefully collected or are attracted towards a light source during the night and selectively collected. Neither collection method has any impact on undesired species.

3.5 Timing and duration of harvesting period

Queen ants generally emerge for nuptial flights throughout the warmer months of the year, ranging through September – April. This is not limiting however, and queen ants may be located throughout the year depending on conditions.

4. Impact of Harvest on the Taxa and the Relevant Ecosystem

During harvesting, the applicant will only access a relatively small portion of the property. The applicant will also only harvest from areas already cleared and will not disturb any bushland area not accessible via an established track or clear area. This means that the surrounding ecosystem will not be disturbed or impacted at all.

Given that all harvesting will be done by hand and is completely selective, it will have little to no impact on any species not listed in attachment A.

The harvest quotas given in Attachment A are relatively small compared to the estimated number of queen ants emerging for nuptial flights for the given species. This means that the harvest will have little to no impact on the sustainability of the species. Additionally, any known established colonies/nests on the property will be protected to ensure sustainability. It is in the applicants best interest to preserve the status of the ants for ongoing viability of trade.

5. Monitoring and Assessment

5.1 Has there been a resource assessment of distribution and abundance for the harvest area

No official resource assessment of distribution and abundance for the harvest area had been conducted. The applicant, however, monitors the property closely and has not seen any significant decrease in populations or abundance since beginning an interest in ants. Recently, several new ant colonies have been discovered which will be protected as best as practicable.

5.2 Will there be independent supervision of the harvesting

No independent monitoring or State/territory control is proposed at this stage. The applicant will monitor the abundance of queens during harvest and will amend/suspend harvesting quotas if any significant decrease is recorded for any species, however given

the relatively small expected quotas any significant overall decrease is unlikely.

5.3 Outline the methods to be employed to monitor the harvesting of the specimens to identify whether the species or other species in the ecosystem are affected by the harvesting

Given that all specimens will be collected by hand, the applicant will accurately record all queens harvested and note any significant changes in abundance. General changes may be due to factors such as climate and weather variations however the applicant will monitor changes and adjust collection numbers in accordance if any significant changes are noted compared to the previous years data.

5.4 Describe any other biological and environmental monitoring proposed for the harvesting area.

Any known established ant nests/colonies in the area will be monitored and protected as is reasonably practical. This will ensure sustainability of the ant species to be collected. As stated above, the applicant will only harvest in accessible areas of the land, therefore protecting the bush areas and ecosystem of the property.

6. Management Strategies

As outlined above, given the relatively small harvest quotas, collection is unlikely to create any significant population change. Population changes may occur for other reasons such as weather conditions and seasonal variations. If a decline for any harvested species is detected for any reason, collection will be revised to ensure ongoing sustainability.

7. Compliance

All ants are harvest by hand and are generally housed individually. This means that every ant can be correctly identified before entering trade. Methods of identification include general knowledge of the applicant and online resources such as antweb.com. If

for any reason identification can not be achieved through these methods, the specimen will not be exported until a positive identification is achieved. Only ants collected under the authority of the WTO will be exported.

8. Reports

Required periodic reporting to the Department as specified in the declaration approving the operation will be provided to the department by the applicant.

9. Background Information

Ants have been around for millions of years and it is thought that ants evolved from wasp-like ancestors. They are said to form 15-20% of the terrestrial animal biomass in ecosystems globally. Ant species are incredibly diverse, and their behaviour is quite unique, which is what makes ant keeping a popular and rewarding hobby.

Ants belong to a family of insects called Formicidae, within a greater order of insects known as Hymenoptera (which also include bees and wasps). Ants don't have a true brain like vertebrates but rather have brain-like groupings of nervous tissue called ganglia.

Ants have various stages of their life cycle. They begin life as an egg, hatch into a larva which molts and becomes a pupa. They have a system of different specialized forms that take on various unique functions within the ant society. There are worker ants who handle the bulk of the colony's duties. There are also female alates which are young virgin queens born in the nest and have wings. These become the new founding queens of their own colonies after they mate during a nuptial flight. The male ants also have wings and their only job is to mate with the female alates during nuptial flight, after which they die.

During a nuptial flight hundreds of female alates fly and mate with males in the air. This

is one of the main reasons that ants cannot be bred in captivity. After mating, the female alates drop to the ground, break off their wings and search for a suitable location to start her new colony. It is during this time that the applicant will be searching for these newly mated queens. After mating, a queen ant can continue to lay fertilized eggs for the rest of her life, up to 30 years!

The earliest known record of the ant keeping hobby can be traced back to 1956 and continues to grow today. Australia is home to many unique and highly regarded native ant species, resulting in high international demand for Australian ants within the ant keeping community. This application aims to expand the knowledge and interest of ant keeping by providing an ethical, sustainable and legal way for international enthusiasts to be able to keep and learn about our incredible native ants.

References:

AntsCanada- The Ultimate Ant Keeping Handbook

<https://www.nationalgeographic.com/animals/invertebrates/group/ants/>

Identification Guide to the Ant Genera of the World- Barry BOLTON (1994)

Attachment A

Proposed taxa for harvest and export

Note: The applicant can harvest any species included in the taxa listed except for species listed under the EPBC Act as threatened (excluding the conservation dependent category) or listed as endangered or vulnerable.

TAXA COVERED		ANNUAL QUOTA
FAMILY:	FORMICIDAE	
GENUS:	Amblyopone	100
GENUS:	Anonycho myrma	100
GENUS:	Aphaenogaster	100
GENUS:	Camponotus	100
GENUS:	Cerapachys	100
GENUS:	Dolichoderus	100
GENUS:	Iridomyrmex	100
GENUS:	Leptomyrme x	100
GENUS:	Mayriella	100
GENUS:	Melophourus	100
GENUS:	Meranoplus	100
GENUS:	Monomorium	100
GENUS:	Myrmecia	100
GENUS:	Oecophylla	100
GENUS:	Podomyrma	100
GENUS:	Polyrachis	100
GENUS:	Rhytidoponera	100
GENUS:	Technomyrmex	100

Attachment B

Harvest Property

