

Tahr Control Operational Plan: 1 July 2022–30 June 2023

Purpose

To detail an annual plan of work that moves towards achieving the objectives of the Himalayan Tahr Control Policy 1991 and Himalayan Tahr Control Plan 1993 (HTCP), within the context of the statutes for which lands are administered.

Context

The Department of Conservation (DOC) and Ngāi Tahu continue to work in partnership to implement the Treaty in relation to implementing the HTCP. This plan has been informed by the results of prior tahr control operational plans¹, results of monitoring of tahr populations in selected management units, and contributions from members of the Tahr Plan Implementation Liaison Group (TPILG). While our understanding of tahr in the landscape has developed substantially in recent years, the complexity of managing that system has also become more apparent. Within that complexity we are now in a position to begin to implement the adaptive approach to management envisaged in the HTCP. This will require a transition over several years and a collaborative commitment to working flexibly within uncertainty. In 2022/2023 the programme can build on substantial learnings from 2021/22, including:

- ▶ data on tahr populations in Management Units 1 and 3 enabling management unit-level population modelling and targeting
- ▶ preparation and trialling of rapid browse impact-assessment protocols
- ▶ development of hunter-led management in Management Unit 1
- ▶ successful ground-based control trials (DOC and hunter-led)
- ▶ strategic planning for tahr control outside the feral range.

Over the coming year the TPILG will continue to provide for effective collaboration amongst parties with interests in the implementation of HTCP. This will include advising DOC and working together to enhance contributions to HTCP implementation. Work this year will focus on scoping longer-term strategies. This will include optimising contributions from recreational hunting, hunter-led management activities, commercial tahr recovery and Aerial Assisted Trophy Hunting (AATH) as opportunities allow.

It seems probable that ongoing effects of COVID-19 will remain in play for the 2022/23 year. The commitment of all parties to effective management of tahr remains strong, and Government commitment to the tahr programme has not changed.

Scope

Included: This document covers management of tahr from 1 July 2022 to 30 June 2023, including:

- ▶ control of tahr on Public Conservation Land (PCL)
- ▶ contributions from recreational and concession hunting, including hunter-led management activities, guiding, commercial tahr recovery and AATH
- ▶ contributions to implementing the HTCP on land tenures other than PCL
- ▶ research and monitoring relating to tahr.

Excluded: This document does not deal with:

- ▶ management of tahr control beyond 30 June 2023
- ▶ tahr farming.

Contributions to control

A suite of contributors will deliver measures to control tahr populations as required to move towards the goals of the HTCP.

- ▶ Recreational hunting contributes within the feral range; though there remain places where recreational hunting will have a limited impact on tahr populations. Hunting will be encouraged by ballots, proactive communication with recreational hunting permit holders, and the provision of information on observations of tahr.
- ▶ Guided hunting will contribute in areas permitted by concessions.
- ▶ Hunter-led management is expected to commence in Management Unit 1 and contribute additional control during this TCOP period; the parameters and timing are currently under development by the Game Animal Council in partnership with Te Rūnanga o Arowhenua.
- ▶ Additional structured recreational hunting opportunities to contribute to implementation of the HTCP will be investigated where appropriate within the Feral Range.
- ▶ AATH environmental offset control may contribute as directed by DOC in areas across the feral range.
- ▶ Commercial tahr recovery may contribute over the year as allowed on non-PCL and under the conditions of concessions to be applied for and issued for PCL.
- ▶ Official control funded by DOC will continue in national parks and where required throughout the management units and feral range and also beyond the feral range. While targets for specific places and methods are set in this operational plan, the quantity and type of effort may be adjusted to respond to areas where information indicates need for control or opportunities for operational efficiency.
- ▶ DOC is committed to exploring additional opportunities for other parties to contribute to control.

Research and monitoring

Implementation of the HTCP requires continued research and monitoring. In 2022/23 this work will include DOC's own planned programme, collaborative programmes, and facilitating the work of others to:

- ▶ conclude a 3-year programme to remeasure historic vegetation plots
- ▶ continue development of a programme for assessment of tahr browse impacts on plant communities across the management units, including elements of mātauranga Māori
- ▶ analyse spatial data on tahr, hunting and ecological values
- ▶ utilise and build on existing information on tahr populations to inform future management action (eg population modelling)
- ▶ improve understanding of recreational hunting's contribution to tahr control.

Operational specifications

Total effort on Public Conservation Land

Acknowledging that an adaptive management approach may require flexibility in operational decisions, the total planned official control effort for 2022/23 is 290 hours of aerial search and control or equivalent official effort via other delivery methods. This effort will be made up of the components outlined below.

Outside the feral range there will be a total of approximately 100 hours of search and control. In addition to helicopter control effort, DOC will also look at the potential of searches and/or control utilising other methods, including alternative aerial and ground-based surveillance and control. Where possible, opportunistic tahr control outside the feral range will be integrated with other DOC control operations (eg wallaby/goat/pig control); this will represent additional effort to the 100 hours.

A total of approximately 170 hours of control effort in the management units for 2022/23 was determined based on available resources, data and observations from prior operational plans and contributions from DOC staff and TPILG members.

Control will be focused where population densities are high and/or in areas inaccessible to hunting and/or where tahr are identified as threatening particular special places (eg national parks and wilderness areas). A particular focus will be further developing targeted ground-based control in West Coast forest ecosystems where browsing impacts are concerning and tahr are difficult to control via recreational hunting and traditional helicopter control.

Approximately 20 hours of control effort will be provided within the feral range but outside the management units defined in the HTCP. These hours will be targeted to reduce the risk of breeding populations spreading beyond the feral range and may be used flexibly along management unit boundaries where those boundaries are close to the feral range boundary and/or exclusion zones.

¹ <https://www.doc.govt.nz/parks-and-recreation/things-to-do/hunting/what-to-hunt/tahr/tahr-control-operations/previous-tahr-control-operational-plans/>

Targeting

General provisions for targeting in official control are given below. These will be refined during operations planning, drawing on expertise from within and outside of DOC.

- ▶ Tahr that could extend the feral range will be targeted as a high priority (eg in areas within the feral range but outside the management units) as they may contribute to source populations outside the feral range.
- ▶ All tahr (including identifiable males) encountered will be controlled in the national park management unit (Management Unit 4), and outside the feral range.
- ▶ Identifiable males will not be controlled in operations undertaken in Management Units 1, 2, 3, 5, 6 and 7, nor outside the management units but inside the feral range.
- ▶ Within management units, stakeholder knowledge will be applied to target areas of highest tahr abundance and/or impacts, with an emphasis on areas inaccessible to hunting and recovery operations.

Learning as we go

DOC, in collaboration with the TPILG members, is committed to learning as we go using available information, including consideration of stakeholder knowledge. This approach will be enhanced over coming years as better data become available and longer-term strategies are enabled.

Approximately halfway through the official control hours period, or by the end of August (whichever comes first), a review will be carried out to ensure optimal use of the remaining control effort. This review will involve the Game Animal Council.

Control of tahr by DOC to date has focused on PCL but it is recognised that substantial tahr populations exist on other tenure in some areas. The HTCP 1993 applies across tenures; understanding the accountability of other land managers to control tahr populations will assist tahr control outcomes across and outside the feral range.

To enhance opportunities for collaborative learning and advance understanding on key issues of common concern, DOC intends to:

- ▶ continue working with the Game Animal Council and Te Rūnanga o Arowhenua to support the development and implementation of hunter-led management in Management Unit 1
- ▶ work with the TPILG to establish longer term strategies for implementation of the HTCP (monitoring, research and control)
- ▶ encourage and support other agencies and land managers to contribute to improving landscape-scale tahr control outcomes.

Priorities for control for 2022/23

Priorities for this year are to:

- ▶ apply a strategic approach to maximising efficiency and long-term outcomes in tahr control outside the feral range
- ▶ prevent spread from the feral range by removing tahr in the exclusion zones (all tahr) and areas within the feral range outside the management units near the feral range boundary (identifiable males will not be targeted)
- ▶ take the Aoraki/Mount Cook and Westland Tai Poutini national parks to the lowest practicable tahr density (noting that control investment will be adaptively managed taking into account observations on tahr abundance and encounter rates per hour of aerial control)
- ▶ bring the tahr population towards intervention levels in the HTCP; focusing the control in management units outside the national parks on localised areas of high tahr density and on hard-to-access/hunt areas (eg wilderness areas). Stakeholders have provided valuable information to assist with identifying focus areas.
- ▶ continue to reduce tahr populations on the West Coast while resuming control in some East Coast locations based on emerging knowledge regarding tahr population levels.

Note: As a principle, DOC will continue to enable reduction of tahr populations as required by the HTCP utilising a variety of available control methods. In particular in 2022/23 we will:









- ▶ increase investment in official ground-based hunting where the circumstances suggest this is an efficient method (eg forest ecosystems)
- ▶ increase variety (temporal, spatial and technological) in aerial control to explore and improve efficiency and reduce animal habituation to control methods
- ▶ explore options to foster the efficacy of population reduction through recreational hunting with 'data confidence' through structured hunting contributions (eg hunter led management in Management Unit 1, tahr ballots and targeted management hunts)
- ▶ work with guided hunting and commercial recovery operators to encourage and facilitate opportunities for commercial control
- ▶ work to understand and improve recreational hunter participation and effectiveness (this will include the provision of information on maps of known high-density areas, identifiable male sightings, easy-to-access areas with high numbers, and communication with hunting permit holders).

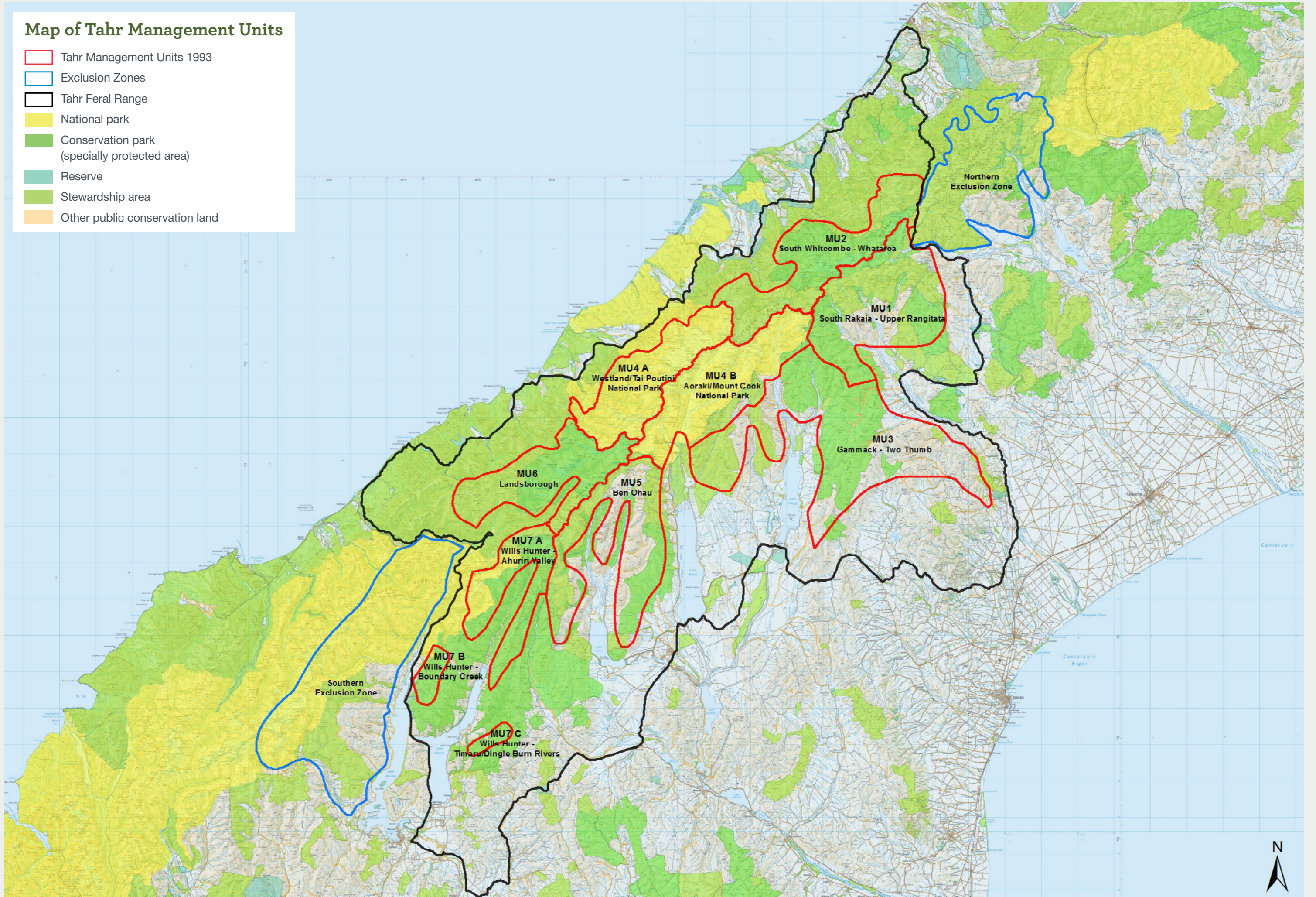
Control work in the feral range

- ▶ All operations shall record data in a standardised way and meet DOC's minimum requirements for tahr control.
- ▶ Control data shall be made publicly available once verified (as per previous years).
- ▶ Where practicable, official aerial control within the feral range will be concentrated between 1 July and 15 November 2022 to avoid kid-drop and peak recreational use periods. Ground-based control may occur at other times. No official control will be carried out in ballot areas until 16 July 2022 to avoid conflict with the ballot period.
- ▶ Official control will give priority to less-accessible areas. Control activities will give consideration to recreational users, including hut users and/or hunters/trampers/climbers etc. If recreational users are sighted, control shall move to another location.
- ▶ No official control work shall be undertaken over a public holiday weekend.
- ▶ Official control will primarily be focused on weekdays to avoid recreational user-conflicts; however, weather windows and operational requirements may require weekend operations.
- ▶ DOC will advise when official control has been completed for the year in a management unit.



Map of Tahr Management Units

-  Tahr Management Units 1993
-  Exclusion Zones
-  Tahr Feral Range
-  National park
-  Conservation park (specially protected area)
-  Reserve
-  Stewardship area
-  Other public conservation land



Priority order of management unit in Himalayan Tahr Control Plan 1993	Intervention levels of tahr/km ² and population size in Himalayan Tahr Control Plan 1993	Control parameters in Himalayan Tahr Control Plan 1993	Control priority in meeting Himalayan Tahr Control Plan 1993 targets	Approach:			
				Recreational hunting	Guided hunting	Commercial tahr recovery (conducted according to permit conditions)	Official control, including contract aerial control, represented by allocated aerial control hours (or equivalent investment in alternative methods)
Outside feral range	Eliminate spread.	Control all tahr.	Official control incorporating ground surveillance in critical areas.	Encourage reporting of sightings and tahr controlled—consider mechanisms to improve this function, including through partnerships with stakeholders.			Approximately 100 hours of search and control ¹ . All tahr encountered will be controlled.
Inside feral range but outside the management units	No current target	Intent is to constrain breeding population and prevent migration to outside feral range.		Encourage hunters to look for, shoot and report tahr.	Ground hunting throughout period. AATH per dates and locations in concessions.	1 July 2022–23 March 2023 ² .	Approximately 20 hours of search and control ¹ . Identifiable males will not be targeted.
1. Wills/Makarora Hunter (Management Unit 7)	<1/km ² and population of <100	Tahr densities not to exceed 5/km ² for any localised area Female-kid groups to be restricted, especially in close proximity to unit boundaries, to 10 or fewer per group Recreational and commercial hunting encouraged, official control where not within set levels	Encourage recreational hunting and commercial hunting first. Official control as required.	Encourage hunters to look for, shoot and report tahr.	Ground hunting throughout period. AATH per dates and locations in concession.	1 July 2022–23 March 2023 ² . Carcass recovery to target nannies and juveniles only.	No official control. Information on tahr abundance will be gathered from observation flights coordinated with other local work.
2. Landsborough (Management Unit 6)	1.5/km ² and population of 900		Encourage increased recreational hunting, guided hunting, and commercial hunting. Official control as required.	Encourage hunters to look for, shoot and report tahr. Ballots in wilderness area.	Ground hunting throughout period. AATH per dates and locations in concession.	16 July 2022–23 March 2023 ² . Carcass recovery to target nannies and juveniles only. No commercial recovery during ballot period within ballot areas.	Approximately 30–35 hours of search and control ¹ targeting all female and juvenile tahr encountered, with a focus on particular catchments where forest impacts are highest. Identifiable males will not be targeted.
3. Aoraki/Mt Cook and Westland/Tai Poutini National Parks (Management Unit 4)	<1/km ² and population of <500		Recreational hunting, guided hunting, and commercial hunting; official control as required to reduce to zero density targeting all tahr.	Explore additional opportunities for hunters to look for, shoot, and report tahr.	Ground hunting throughout period. AATH per dates and locations in concession.	1 July 2022–23 March 2023 ² .	Approximately 90 hours of search and control ¹ with a focus on reducing tahr numbers to as close to zero density as practicable. As per the 2021/22 TCOP, control targets all tahr, with the majority of effort focused on Westland/Tai Poutini national park.
4. South Whitcombe/ Wanganui/Whataroa (Management Unit 2)	2/km ² and population of 1500		Encourage increased recreational hunting and guided hunting, then commercial recovery. Official control as required.	Encourage hunters to look for, shoot and report tahr. Ballots in wilderness area.	Ground hunting throughout period. AATH per dates and locations in concession.	16 July 2022–23 March 2023 ² . Carcass recovery to target nannies and juveniles only. No Commercial Recovery during ballot period within ballot areas.	Approximately 15 hours of search and control ¹ targeting all female and juvenile tahr encountered. Identifiable males will not be targeted.
5. Ben Ohau (Management Unit 5)	2.5/km ² and population of 1800		Encourage increased landowner control and recreational hunting and guided hunting first, then commercial recovery. Official control as required.	Encourage hunters to look for, shoot and report tahr.	Ground hunting throughout period. AATH per dates and locations in concession.	1 July 2022–23 March 2023 ² . Carcass recovery to target nannies and juveniles only.	Approximately 5–10 hours of search and control ¹ targeting all female and juvenile tahr encountered, with a focus on preventing dispersal into the National Park, parts of the area where tahr numbers remain high and where recreational hunters have limited effect due to difficult access. Identifiable males will not be targeted.
6. South Rakaia/Rangitata (Management Unit 1)	2.5/km ² and population of 2000		Encourage recreational hunting first, then guided hunting, then commercial recovery. Official control as required.	Encourage hunters to look for, shoot, and report tahr through hunter-led management	Ground hunting throughout period. AATH per dates and locations in concession. Activities to be integrated with hunter-led management where possible.	Potential for integration with hunter-led management to be explored.	10–20 hours of search and control ¹ to be integrated with hunter-led management if practicable. Identifiable males will not be targeted.
7. Gammack/Two Thumb (Management Unit 3)	2/km ² and population of 3000		Encourage landowner control, increased recreational hunting and guided hunting first, then commercial recovery. Official control as required.	Encourage hunters to look for, shoot and report tahr.	Ground hunting throughout period. AATH as per dates and locations in concession.	1 July 2022–23 March 2023 ² . Carcass recovery to target nannies and juveniles only.	Approximately 10 hours of search and control ¹ targeting all female and juvenile tahr encountered, with a focus on the parts of the area where tahr numbers remain high, preventing dispersal into National Parks and where recreational hunters have limited effect due to difficult access. Identifiable males will not be targeted.

¹operational effort is specified in terms of hours of helicopter-based aerial hunting as this is the primary historic method for tahr control. However, the allocated effort may be delivered under this plan as a comparable investment in alternative methods (eg ground-based control)

²specific place and/or date-based exclusions may apply within this time period