

Report on the Himalayan Tahr Control Programme 2020/2021



Context

The management of Himalayan tahr (tahr) on Public Conservation Land (PCL) is guided by the Himalayan Tahr Control Plan (HTCP) 1993. The HTCP 1993 sets a maximum population of 10,000 tahr across lands of all tenure throughout the feral range, as well as individual maximum tahr population densities for each of seven designated Management Units (MU), based on factors including location, vegetation, and recreational use. It also outlines expectations for monitoring tahr populations and vegetation condition to inform future tahr management.

The HTCP 1993 is implemented through annual operational plans that identify management actions for each MU. As the Department's (DOC) Himalayan tahr management work is led as a national programme, one annual operational plan is prepared for the entirety of the programme, and a single annual report provided to the New Zealand Conservation Authority (Authority).

2020/2021 Programme Highlights

Delivery of the TCOP 2020/21

The initial TCOP 2020/21 was developed in partnership with Ngāi Tahu and through engagement with the Tahr Plan Implementation Liaison Group (TPILG). The first approximately 118 hours of control for 2020/21 were completed under this TCOP. The remainder of control for the 2020/21 year was delivered under a reconsidered TCOP 2020/21 following additional consultation. Table 1 below outlines the number of tahr controlled over the full 2020/21 year within the management units and across each control type. This excludes some aspects of recreational hunting where no data is available.

Table 1: Number of tahr controlled within Management Units

Year 1 July – 30 June	DOC	AATH trophies	AATH 'environmental contribution'	Ballot hunters	WARO	Organised recreational hunters	Other	Total
2018/19	168	264	0	619	400	63	244 ²	1758
2019/20	7238 ²	8	2936 ³	726	421	0	60 ¹	11389
2020/21	7481	8	0	889	0	0	60 ¹	8438

¹ Zero Invasive Predators control; ² Includes contracted control; ³ Includes control not undertaken in 2018/19.

Tahr control outside the feral range

Control of tahr numbers outside the identified feral range is key to reducing range expansion and minimising the creation of new populations. A total of 265 tahr were controlled outside the feral range over the period 1 July 2020 to 30 June 2021. Appendix 1 provides a map with details on the number of tahr controlled in specific areas outside the feral range over this time period.

Game Animal Council control mid-point meeting

Per the changes included in the revised TCOP 2020/21 (see below), the Department met with the Game Animal Council on 8 September 2020 to discuss operational details of the first half of official tahr control for 2020/21 outside the national parks (MU4). DOC considered the Council's advice in determining the operational detail of work for the remaining control effort outside of the National Parks Management Unit (MU4).

COVID-19

The COVID-19 pandemic continued to restrict access for international visitors in 2020/21, so few trophy animals were taken by the commercial sector. There was only a small amount of Aerially Assisted Trophy Hunting (AATH) for the 2020/21 year (see Table 1). DOC had anticipated this outcome, and that Wild Animal Recovery Operations (WARO) contributions would also be negligible (see Table 1). These factors were taken into consideration when setting the level of official control for 2020/21.

Tahr Programme 2020 Legal proceedings

Legal proceedings on the TCOP 2019/20 were lodged by the Royal Forest and Bird Protection Society of New Zealand (Forest & Bird) in early 2020. These challenged the transitional nature of the plan, the use of hours of effort as an indication of control, and the decision not to target identifiable male tahr in the national parks' MU. Following the results of subsequent legal proceedings on the TCOP 2020/21 as outlined below, these proceedings on the TCOP 2019/20 were withdrawn by Forest & Bird.

In late June 2020 the New Zealand Tahr Foundation (NZTF) filed judicial review proceedings in respect of the TCOP 2020/21. The grounds under which the NZTF sought this review included:

- that the decision to adopt the TCOP 2020/2021 is ultra vires the Wild Animal Control Act 1977, the Himalayan Thar Management Policy 1991 and the Himalayan Thar Control Plan 1993;
- that there had been inadequate consultation;
- and that the decision to adopt the TCOP 2020/2021 had been made with those responsible for it having asked the wrong questions and based on insufficient information.

The High Court upheld only one aspect of the above - which was a partial inadequacy by the Department not providing the NZTF with the number of control hours it was proposing to undertake, and the assumed resulting control of 7,500 tahr, in a reasonable timeframe for feedback. The Court directed the Department to consult further with NZTF and other stakeholders. The Court also directed the Department not to undertake more than half of its proposed 2020/21 tahr control (up to 125 hours) until that consultation was completed.

Following this judgment, the Department undertook further consultation followed by reconsideration of the TCOP 2020/21. As a result of this reconsideration, the following changes were made to the original plan:

- DOC reduced its previously planned control hours within the South Rakaia and Upper Rangitata management unit.
- DOC indicated it was likely to cease control for the year in the Wills/Makarora/Hunter management unit (MU7) where tahr numbers were at relatively low densities.
- DOC made it clearer in the plan that it was avoiding popular hunting spots and huts and focused on controlling high densities of tahr within terrain that is less suitable for ground hunting.
- DOC provided for a discussion with the Game Animal Council on operational detail after half of the planned aerial tahr control (125 hours) had been completed in the management units outside the national parks (MU4). DOC then considered the Council's advice in determining the operational detail of work for the remaining control effort outside of the National Park Management Unit (MU4).
- DOC committed to urgency in beginning effective tahr programme research and monitoring.

Relationships and Engagement

Relationship with Te Rūnanga o Ngāi Tahu

During 2020/21, DOC and Ngāi Tahu continued their commitment to developing the Treaty partnership in relation to tahr management. This included early discussion on TCOP intent and reflection of the Treaty relationship in the TPILG's refreshed terms of reference (see below).

Tahr Plan Implementation Liaison Group

Stakeholder engagement for 2020/21 centred around the TPILG, which includes representatives from Ngāi Tahu, statutory boards and authorities, the recreational and commercial hunting sector, farming, outdoor recreation, and Forest & Bird.

Discussion on refreshing the TPILG's terms of reference (TOR) has been ongoing. In the 2020/21 year, this refresh was finalised. The aims of the refresh included to:

- Give greater certainty about the purpose and role of the Group;
- Reflect the Treaty relationship that has developed between Ngāi Tahu and DOC;
- Clarify which organisations sit on the TPILG;
- Define how member organisations join and leave the TPILG;
- Provide clarity on what will be brought to the TPILG for receipt of contributions and discussion.

A draft of the refreshed TOR was tested with Ngāi Tahu and the Game Animal Council prior to being discussed at the TPILG meeting on 15 December 2020. Comments were received and an opportunity made for provision of further written comments following the meeting. Following consideration of all member comments, the refreshed TOR was finalised prior to the 16 March 2021 TPILG meeting.

Engagement with the TPILG on development of the TCOP 2021/22 occurred over a period of five months, including two TPILG meetings held on 15 December 2020 and 16 March 2021. At the December 2020 meeting, contributions were sought on the initial framework for the TCOP 2021/22. At the March 2021 meeting, discussion was held on a pre-circulated draft TCOP 2021/22. Following both meetings, the opportunity was provided for members to provide further written comments to the Department. Feedback from these meetings and written submissions helped to refine the 2021/22 plan, with the final TCOP 2021/22 being released on 10 May 2021.

The final plan was generally well received by stakeholders, with the Game Animal Council's media statement including that: "The Game Animal Council (GAC) is welcoming the release of the Himalayan Tahr Control Operational Plan 2021-2022 as a pragmatic approach to tahr management...". Likewise, the New Zealand Deerstalkers' Association's media response stated that "The New Zealand Deerstalkers Association believes the Department of Conservation's 2021/22 tahr control operational plan released yesterday is a step in the right direction and notes the plan acknowledges the important role played by recreational hunters in tahr management".

Information Management

Electronic verification tool and Tablet Data System

In the 2020/21 year the tahr programme continued utilising its electronic verification tool for remote monitoring of control operations, with digital cameras fitted to the rear step of helicopters used for aerial control to take a series of high speed still photographs with geo-referencing each time a firearm is discharged. Additional operators were set up with verification systems in the 2020/21 year and further units were constructed to support contingency and succession planning. The programme's tablet-based data recording system also continued in 2020/21, allowing control effort data to be electronically recorded as it occurs and enabling generation of detailed maps of operational results (see Appendices).

App for recreational hunters

In the 2020/21 year the Tahr Returns smartphone app designed by DOC with the Game Animal Council, New Zealand Deerstalkers Association, and New Zealand Tahr Foundation had low uptake by recreational hunters, with many of the reported numbers also reflecting tahr taken outside the management units. As a result, there has been some discussion with the above entities on whether to continue the app.

Updates to Hunting Stakeholders

In 2020/21 DOC has continued providing tahr programme updates regularly through our website to encourage and enable recreational hunters to contribute to tahr control. This includes providing information on where identifiable male tahr have been seen during official control operations to assist hunters to plan, locate and shoot bull tahr (see Appendix 2 for an example map). Continual updates are also provided when official control work in each area is complete for the season to give hunters certainty on areas they can hunt tahr knowing Departmental control for the year is complete.

Email updates to current hunting permit holders also began on 14 July 2020 to connect hunting stakeholders with new tahr programme information as it becomes available, including provision of direct links to the website content outlined above. In the 2020/21 year, email updates to current hunting permit holders were provided on:

- 14 July 2020
- 14 August 2020
- 27 August 2020
- 1 September 2020
- 14 September 2020
- 26 November 2020
- 10 May 2021
- 21 June 2021

Summary of Control Operations

Per above, DOC was able to deliver up to 125 hours of tahr control until the further consultation on the TCOP 2020/21 was completed. Approximately 118 hours of control were completed during this time. Following the decision on the revised TCOP 2020/21, the remainder of the control activity was undertaken under this revised plan. The resulting number of tahr removed by official Departmental control in each Management Unit are detailed in the 2020/21 row of Table 2 below.

Table 2 - Tahr removed by Official Departmental Control

Year 1 July – 30 June	MU 1	MU 2	MU 3	MU 4	MU 5	MU 6	MU 7	OUTSIDE FERAL RANGE	TOTAL
2018/19	168	0	0	0	0	0	0	387	555
2019/20	2113	246	1603	3675	1278	1332	58	517	10822
2020/21	555	1038	641	3299	241	1697	10	265	7746

List of Management Units: MU 1 Rakaia / Rangitata; MU 2 South Whitcombe / Whataroa; MU 3 Gammack / Two Thumb; MU 4 Westland Tai Poutini NP/ Aoraki Mt Cook NP; MU 5 Ben Ohau; MU 6 Landsborough; MU 7 Hunter / Wills. Outside Feral Range is inclusive of tahr removed in the Northern and Southern Exclusion Zones.

Note: The numbers of tahr removed across all management units for these three years are sourced through DOC-led control made up of a mixture of contract control, AATH environmental contributions and DOC control. Not recorded on this table is tahr across all management units that have been removed by AATH trophies concessions, ballots, WARO, Zero Invasive Predators and organised hunts (see Table 1).

Status of Management Units (MUs)

Population estimate

The most current tahr population estimates were provided in DOC's 2019/2020 report to the Authority on the Himalayan Tahr Control Programme. These reflected aerial surveys undertaken during 2016 – 2019 which provided estimates of tahr population size on PCL as

compiled in Ramsey and Forsyth's September 2019 report: [*Estimates of Himalayan Tahr \(*Hemitragus jemlahicus*\) Abundance in New Zealand: Results from Aerial Surveys.*](#)

Further aerial surveys have now been conducted in the South Rakaia/Upper Rangitata (MU1) and Gammack/Two Thumb (MU3) management units during February – May 2021. The results of these surveys were not yet available in the 2020/21 year. Maps of high tahr densities observed during these surveys were provided on the DOC website to encourage hunters to contribute to tahr control (see Appendix 3 for an example). Representatives of the Game Animal Council and Land Information New Zealand engaged directly with this monitoring work by taking up the offered opportunity for TPILG members to attend one of the 2x2 km counts flights.

Estate condition trend

Ongoing monitoring of estate condition in the tahr feral range occurs through the national monitoring system (Tier 1), along with additional longer-term monitoring of grassland plots. A range of reports examining the impacts of tahr were provided in the 2019/20 report to the Authority.

In the 2020/21 year, a third of the historic grassland plots, which represent the longest running vegetation survey in the tahr feral range, were re-measured. Remeasurements of the remainder are to be conducted over the next two years. A representative of TPILG member the New Zealand Tahr Foundation engaged with this monitoring programme in 2020/21 by attending the grassland survey as an observer.

As outlined below, DOC has developed a research and monitoring strategy to inform the future of tahr management, including through future estate condition monitoring.

Tahr outside the feral range

Tahr control currently occurs on PCL outside the feral range in areas identified as containing tahr. All stakeholders agree that decreasing the spread and dispersal of tahr outside the feral range, with the long-term goal of eradication outside of the feral range, is important work. DOC will continue to work on this issue with a variety of agencies and landowners and will also look at working with programmes led by other agencies, such as wallabies, to continue to build a more complete picture of tahr outside feral range. Tahr control in some areas outside the feral range may be complicated due to some landowners' perspectives on removing tahr from their land.

Appendix 1 provides a map with details on the number of tahr controlled in specific areas outside the feral range over the period 1 July 2020 to 30 June 2021, totalling 265 tahr in all. In 2021/22, DOC will establish a working group with the hunting sector focused on optimising tahr control outside the feral range (see below).

Liaison with contributors to management

Recreational Hunters

DOC seeks to encourage hunters to shoot tahr. In 2020/21 DOC continued to work with the recreational hunting sector to improve the availability of information on both control activity and observations of tahr. This included posting maps of control effort (see the example in Appendix 4), the locations of observed identifiable males (see the example in Appendix 2), and maps of high tahr density areas observed during the population surveys in Autumn 2021 (see

the example in Appendix 3), to DOC's website and by providing email updates to current hunting permit holders (see above).

Following the effects of COVID-19 on tahr hunting opportunities in 2019/20, the West Coast tahr ballot period for the 2020/21 year was extended to 11 weeks. This also included roll-over of ballots affected by COVID-19 in the 2019/20 year. It is anticipated that extension of the tahr ballot period is likely to continue in future years.

Operators

In consideration of the impacts of COVID-19 on helicopter operator businesses, DOC worked to spread planned tahr control hours across the Department's group of operators, with the aim of supporting continuity of these businesses and associated operator capacity for future years.

Research Updates

Research and Monitoring Strategy

In the 2020/21 year, a research and monitoring strategy for tahr was completed to support the implementation of the HTCP 1993 and based around six research themes:

- Tahr population dynamics and ecology
- Environmental impacts of tahr
- Hunting and control
- Socio/economic considerations of values and costs
- Site based management, i.e. tahr and other introduced mammals in alpine ecosystems
- Research with no direct implication for tahr management

The strategy includes analysis of options for outyears as well as for the 2020/21 year and a draft was provided to the TPILG prior to its December 2020 meeting. Contributions from members of the group were then received for consideration in refining the strategy.

Following this, an operational plan for 2020/21 was developed and the historic grassland plot remeasurements (see above) commenced, as did the population surveys in two MUs. Work also began to further operationalise the strategy through development of a short to medium term action plan for tahr research and monitoring. Upon completion, the draft action plan will be circulated to TPILG members for receipt of any contributions to inform the plan's finalisation.

Fixed-wing surveys of tahr populations on Crown Pastoral Lease land

In 2020/21 Land Information New Zealand led work to undertake surveys of Crown Pastoral Lease land (CPL) to gather information on tahr population numbers. The purpose of this work was to generate information for discussions with leaseholders regarding tahr management considerations on CPL.

Outlook and Plans for Next Year

Working Groups

Per the TCOP 2021/22, DOC intends to establish three working groups with stakeholders for 2021/22. These will be focused on:

- Longer-term tahr programme operational planning.
- Optimising tahr control outside the feral range.

- Determining how the hunting sector can take a lead in tahr management at specific locations, initially focusing on Management Unit 1

Hunter-led management

In 2020/21 DOC began discussions with the TPILG on what hunter-led management of the tahr population within the South Rakaia/Rangitata Management Unit (MU1) would look like. This could involve hunters managing tahr populations and reporting on tahr numbers and the health of ecosystems. In 2021/22 DOC will continue to work with stakeholders to progress hunter-led management in MU1, including through the planned working group (see above).

Development of rapid impact assessment method for tahr browsing

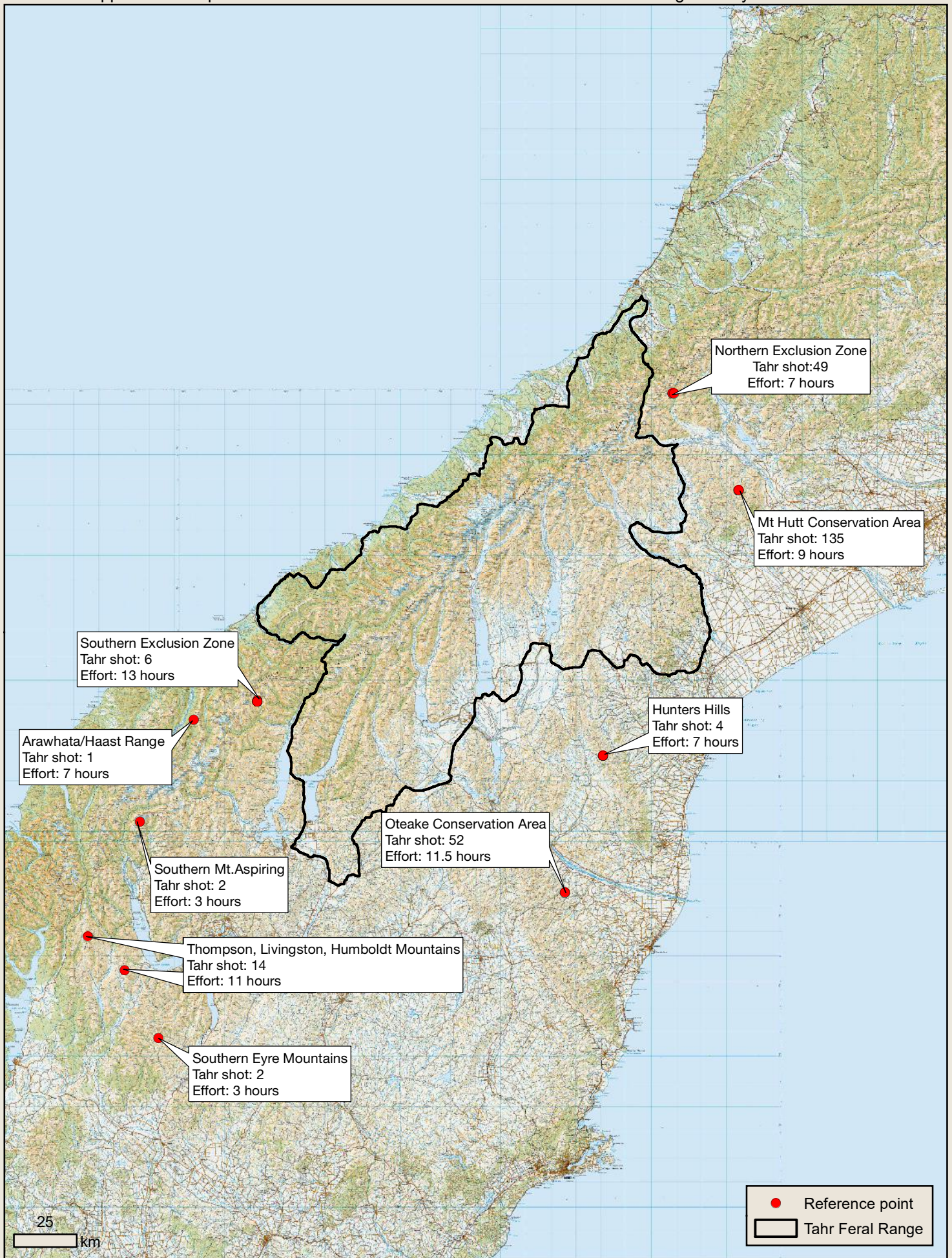
In 2021/22 DOC will lead work to develop a plan for rapidly assessing short term changes in MU plant species with high palatability to tahr. This would be intended to provide information on tahr impacts to supplement long-term vegetation trend data and inform shorter timescale tahr management decisions (e.g. where control effort is best focused in a given year).

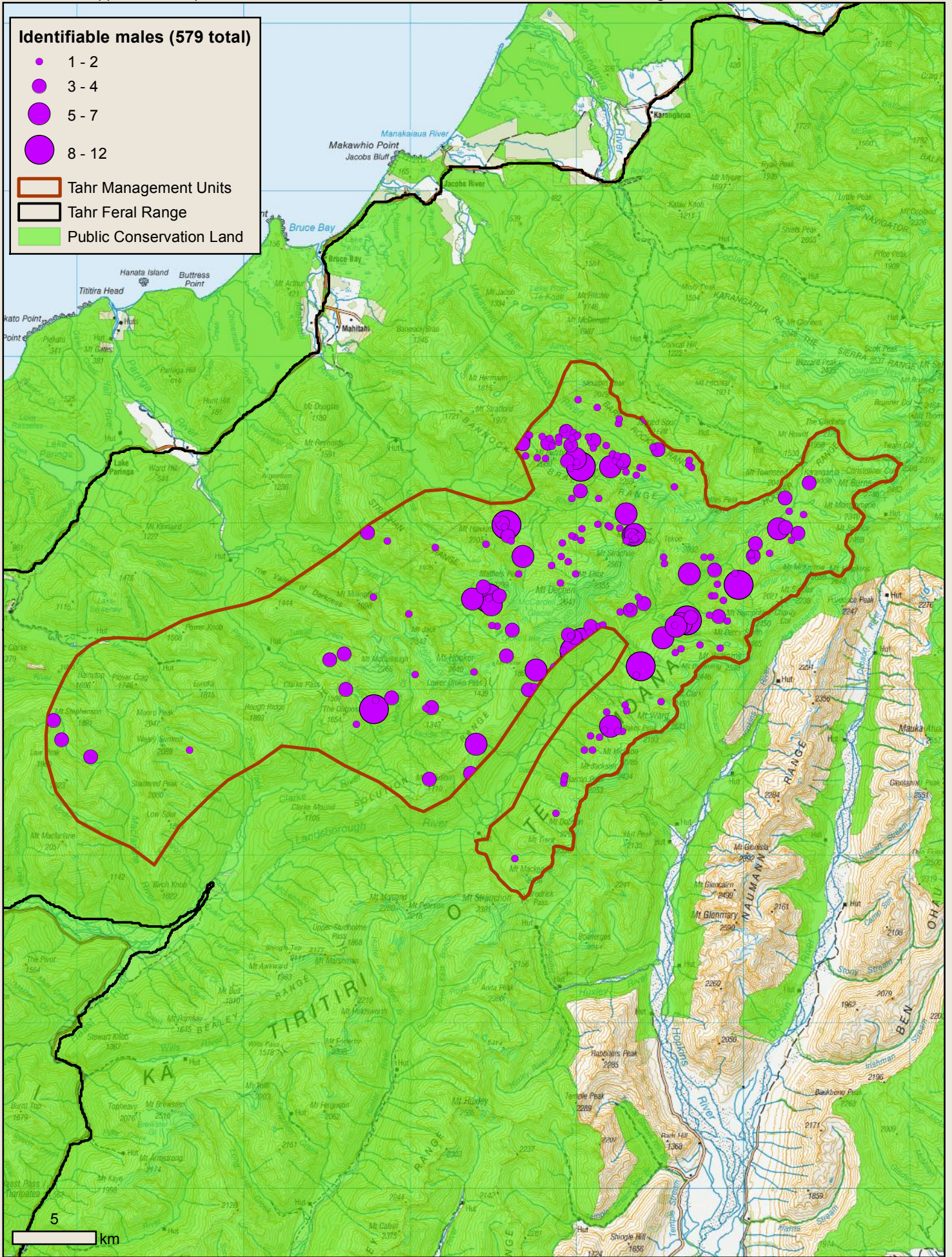
COVID-19

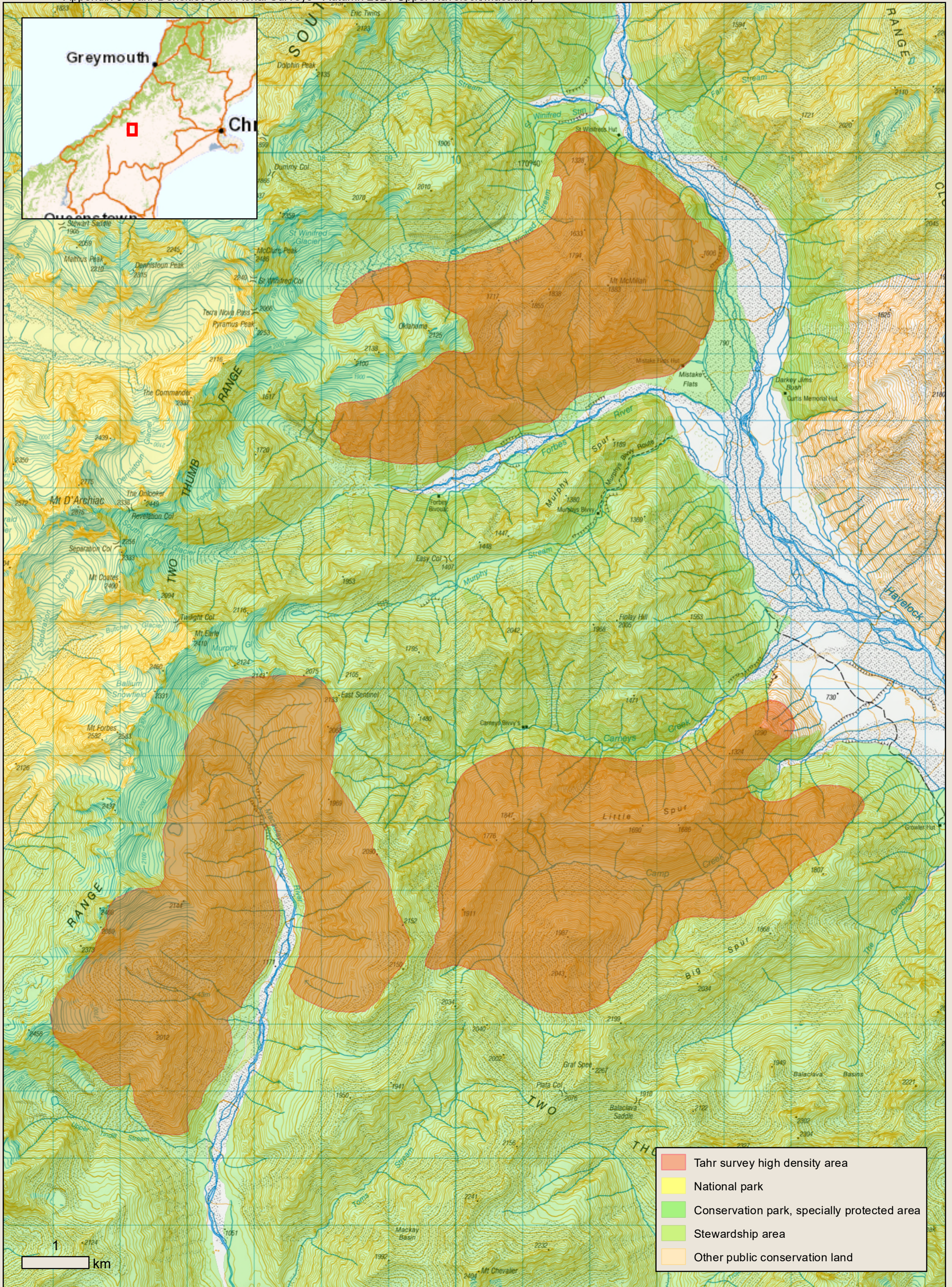
It is anticipated that COVID-19 may continue to have an impact on tahr management in future years. In 2021/22 this is likely to include the impact of continued border restrictions on the commercial hunting sector, with flow-on effects for AATH environmental contributions and control contributions from WARO and guided recreational hunting. In addition, any future COVID-19 lockdowns could affect the timing and implementation of DOC aerial control operations.

Financial Summary (1 July 2020 to 30 June 2021)

Operational costs for the 2020/21 financial year were approximately \$780,000.







Tahr Densities From Aerial Surveys – Autumn 2021 Upper Havelock/Macauley

