



Targeted Harvest Report 2024

PURPOSE

This report was commissioned by the NZTF management committee 2024 to outline the operational results of the ground-based targeted harvest of female tahr populations in the Makawhio and Mahitahi Valleys.

BACKGROUND

The New Zealand Tahr Foundation (NZTF) is a not-for profit organization established in 2016 with the purposes: education, co-ordination among stakeholders, to manage Himalayan Tahr and acquire “Herd of special interest” (HOSI) status for the Tahr herd via the Game Animal Council Act 2013.

A “HOSI” designation enables the management of game animal

populations, subject to adequate environmental protection, for the purposes of hunting. However, the NZTF’s key undertaking since 2018 has been to minimize the adverse impacts on the hunting sector of DOC’s Tahr population reduction efforts, by advocating for effort to be directed and coordinated so that cultural and recreational values are maintained as far as possible.

To achieve this goal and to reduce pressures on biodiversity, as outlined by the Te Mana o te Taiao Aotearoa Biodiversity Strategy 2020, effective tahr population management tools must be applied based on landscape attributes, animal behaviors and resource values at place.

A significant number of tahr have been removed from the feral range and exclusion zones over the past 4-5 years following the directive of the Minister of Conservation to reduce tahr numbers closer to the intervention densities outlined in the “Himalayan Tahr Control Plan 1993” (HTCP).

However, this has largely been undertaken by aerial search & destroy control operations which are not effective in scrub and bush areas, a significant component of tahr habitat in South Westland. Furthermore, sustained long term helicopter pressure from aerial control may increase tahr occupation of bush & scrub habitat, increasing the tahr impacts on biodiversity in these areas.

It is apparent that management of tahr populations to reduce impacts on bush, scrub & fringe alpine

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vegetation requires ground-based hunting effort. It is acknowledged since commencing NZTF trial ground control that ground-based work by DOC has been undertaken in the Adams valley and some of the Landsborough valley.

In January 2021, the NZTF identified pockets within the HTCP Management Unit 6 – Landsborough, specifically the Makawhio / Jacobs Valley, West Coast, where tahr browse impacts to thick vegetation and high female tahr densities were observable.

The NZTF undertook a successful female tahr population management operation, “targeted harvest trial,” during March 2022. Following meetings with DOC staff it was agreed to continue with the trial and add the Mahitahi valley head water site as well due to concerns about herd numbers and impacts there. The 2023 management hunts were undertaken in late February

(Mahitahi) and early March (Makawhio / Jacobs).

NZTF ANNUAL TAHR MANAGEMENT PLANS

The New Zealand Tahr Foundation (NZTF) and the Department of Conservation (DOC) entered into a 3-year Community Agreement in February 2022 (DOCCM-6920217). As a requirement of the Community Agreement the NZTF will consult with DOC South Westland District staff and provide the Director General an annual Tahr Management Plan (TMP).

NZTF and DOC representatives met in Haast on September 7, 2022, to discuss the results of a successful NZTF-led tahr population management trial in the Makawhio / Jacobs valley in March 2022 and to discuss a plan for the year ahead. A plan was subsequently provided and approved for 2023 the Makawhio /

Jacobs Valley, and to extend NZTF-led tahr population management to a single site at the lower Mahitahi ballot camp site to cover the Mahitahi headwaters and if time permitted, the Troyte catchment of the Karangarua, in Westland National Park.

NZTF and DOC met again on 7th November 2023 in Franz Josef to discuss the previous season work and a plan for 2024, acknowledging that it was unlikely that any work would be done in November and that realistically the 2024 plan would be focused on March 2024.

The 2024 management plan builds on the previous successful “targeted harvest trials” establishing sustained hunter-led tahr population management in the Makawhio / Jacobs and Mahitahi Valleys to pursue both biodiversity and hunter interest objectives.

OPERATIONAL
PLANNING 2024

Ground-based hunts of 3-5 days were to be undertaken at each of the sites listed below. Nanny group sizes and distribution recorded, and vegetation status subjectively assessed at each site. Tahr populations observed were to determine if further population management is required in the year following at sites.

Makawhio / Jacobs

One operation at each site (upper and lower landing sites). The lower site is a challenging place to hunt, minimizing scent dispersal is important for success. The upper site is less challenging to hunt but covers a much larger area, suitable for more hunters.

Timing: March or November – subject to volunteer availability and weather.

Mahitahi

A follow-up operation as per 2023 to gauge success and determine future effort.

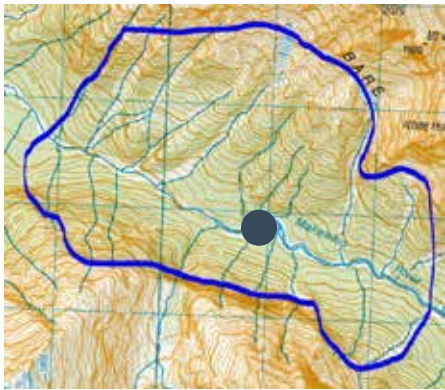
Timing: March subject to volunteer availability and weather.

Troyte

One operation initially as an exploration. The valley was previously identified as a bull stronghold and an important recreational hunting area, but nanny populations have increased, displacing bulls.



Makawhio / Jacobs: Upper site – 3 hunters (1 helicopter load).



Makawhio / Jacobs: Lower site – 2 hunters (1 helicopter load).



Mahitahi: Lower camp site – 3 hunters (1 helicopter load).



Troyte: Single site – 2 or 3 hunters (1 helicopter load).

Timing: March or November subject to volunteer availability and weather.

MANAGEMENT TARGETS

As per the NZTF Standard Operating Procedures only identifiable nannies were to be shot. To achieve the management targets hunting parties were to include at minimum 2/3 experienced hunters preferably 1 of each party having been engaged on management hunts at site previously. Two person parties will be experienced hunters only.

SEASONAL MILESTONES:

- Reduce adult female tahr populations in the Makawhio

valley (upper and lower sites) and Mahitahi valley site as far as possible (recognizing the difficulty in hunting bush clad environments).

- Reduce adult female tahr populations in the Troyte valley as far as possible due to the National Park land status.

Note: Seasonal milestones are to be met by the end of March leaving April free for hunters and tahr time to settle before the rut ballots begin and commercial activities are permitted.

GROUND-BASED
MANAGEMENT CRITERIA

- Mature nannies only to be shot

- Good shot placement.
- Non-toxic (lead free) ammunition to be used.
- Track logs to be recorded during hunting or drawn on map after each hunt should equipment failure occur.
- Record locations and numbers of tahr harvested onto the NZTF App or GPS.
- Photograph kills able to be accessed without risk or significant time wasting
- Record numbers and approx. age /sex of observed of non-target animals.
- Vegetation assessments to be conducted using the NZTF App or Camera.
- Volunteers are encouraged to salvage meat where possible and sensible and where it does not impact significantly on hunting efficiency.

TAHR / VEGETATION MONITORING ACTIVITIES

Vegetation monitoring in both alpine and forest habitats is the responsibility of DOC. However, the NZTF hunters on site for management operations take notes and photographs of vegetation status. Further collaboration between NZTF and DOC for improved environmental monitoring is anticipated.

HEALTH & SAFETY

All volunteers were given a health and safety briefing before departure as per the Community Agreement DOC approved Health & Safety plan.

RESULTS

Operation	#Hunters	#Hours	#Hunter Days	Harvest	
				Harvest total	Av. Per Hour
Makawhio Lower	2	55	6.1	78	1.42
Makawhio Upper	3	64	7.1	147	1.99
Mahitahi	3	85	9.4	105	1.24
Total	8	204	22.6	330	1.55

OBSERVATIONS VS KILLS

Operation	#Hunters	Observed	Kills	% Kill
Makawhio Lower	2	170	78	46%
Makawhio Upper	3	397	147	37%
Mahitahi	3	193	106	55%
Totals	8	760	331	44%

Once on site the team had discussion to identify and discuss any on site issues identified. In addition, hunters were to abide by the following:

- Each hunter was required to carry a first aid kit and each party hold a more comprehensive first aid kit at the tent base camp.
- Each morning the teams were to confirm where they are going to hunt and expected routes of travel and return.
- Each hunter was required to carry either a Personal Locator Beacon or an In-Reach device.
- Each party was to have at least 1 in-Reach device so they can communicate with the NZTF Operational Lead as required, or pilot directly if necessary.
- Each hunter was required to wear at least one hi-vis piece of clothing when hunting and away from camp.

- Immediately after returning from each trip volunteers were required to report to the NZTF Operational Lead, confirm their safe return and report any incidents.
- The Operational Lead was then to advise DOC that everyone has safely returned or of any incidents.

OPERATIONAL OUTCOMES

Poor weather plagued operational efforts throughout late February and most of March with mostly single fine mountain weather day opportunities. The only possible opportunities with at least 2 days or more were utilized for the priority sites as follows:

The Makawhio upper and lower operation was undertaken 17th – 20th March by three and two

experienced hunters respectively. The Mahitahi operation was conducted 29th – 31st March by three experienced hunters.

There was insufficient weather or volunteer availability to visit the proposed Troyte site during March.

DATA ANALYSIS

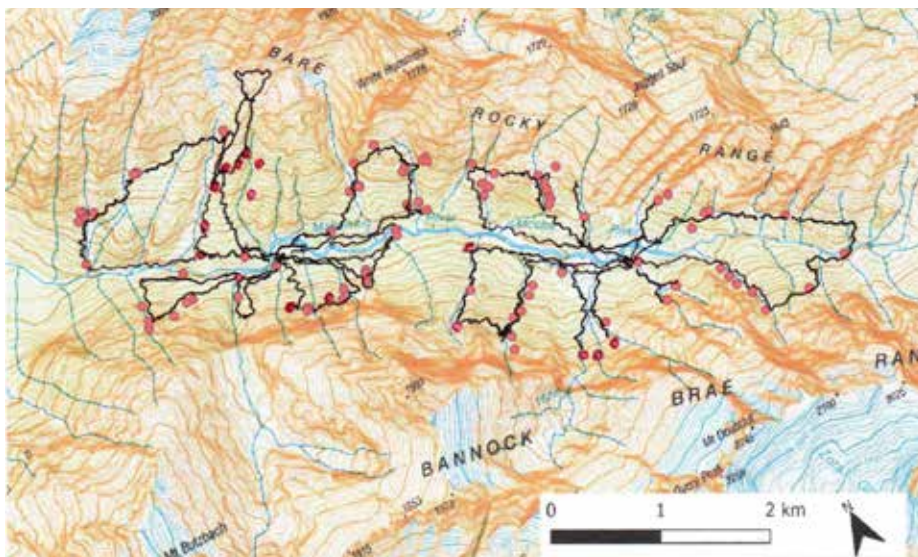
Track logs and waypoints where tahr were shot were loaded onto ArcGIS Pro. Hunter-day was calculated from the total hours hunting for the operation divided by nine (the average hours spent hunting on full days). Average tahr per hour and day were calculated for comparative reporting.

HUNTER REPORTING

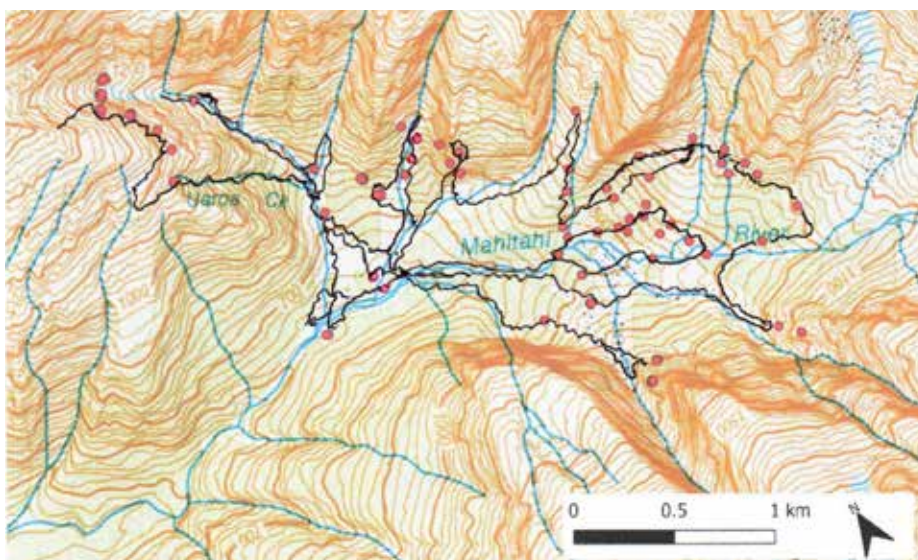
The average tahr per hour shot at 1.55 was lower on average than that of 2023 at 2.1 (and slightly lower than 2022 at 1.6). This may indicate some improvement in the reduction of total animal numbers but also may reflect other environmental factors such as timing, climate conditions, timing of any AATH offsets and the fact that it more difficult to shoot groups of animals predominantly living in the scrub and bush.

There was a similar number of hunter days undertaken at 22.6 versus 21.2 in 2023. The overall result is a lower number of tahr removed at 330 versus 412 in 2023, but higher than the 182 in 2022.

Weather conditions were reported to be foggy and drizzly at times during



Makawhio / Jacobs kill locations and track logs.



Mahitahi kill locations and track logs.

the Makawhio hunts but overall OK. In the Mahitahi the weather was mostly clear but clouded in on the last full day at altitude. These were the only two weather windows with sufficient time to undertake the hunts in March 2024.

A reduction in numbers for effort in the Mahitahi this year would seem to indicate the decision to start managements hunts in 2023 was well timed

Hunters are still shooting a reasonable number of adult nannies in and around bush and scrub areas in the 7 – 13 year age bracket, but less older animals than the previous year, however it's a little early to tell if there is a changing population dynamic as a result of the management hunts at this stage.

Of note most hunters reported increased encounters in the scrub margins and bush with less

observations and encounters in the open alpine areas. This appears to correlate with increased impacts on vegetation within the alpine shrublands and forests.

Approximately 37-55% of tahr observed were shot depending on location see table below. The remaining tahr not shot included identifiable bulls, nannys that escaped into cover and juveniles.

VALLEY COVERAGE & KILL LOCATIONS

The Makawhio Lower covered a larger area than during the 2023 operation. There was also a little more country covered in the lower Mahitahi compared to 2023

PHOTOGRAPHIC CONFIRMATION

Kills were confirmed by visual observation of death or confident shot placement. As was reported in previous years, photographing tahr shot is challenging and as in previous years just animals easy to get to were photographed.

Hunters take photographs only when safe to do so and when the effort taking a photograph doesn't result in disturbance or time wastage that would reduce efficiencies, e.g., shooting opportunities. A few very small juveniles were shot to prevent them being left to starve; larger juveniles were left.

There is difficulty discerning females from young bulls when



Photographic confirmation examples.

groups are on the run, so there are a few juvenile bulls accidentally shot. Some of the kills photographed are shown in the collage below.-

COSTS

The total cost of the operation was NZ\$4429 (up approx. \$1000 on last year). This does not include the cost of ammunition, provided by DOC at no charge. This is equivalent to \$13.40 per tahr an increase on last year due to a) less

animals shot and b) modest heli hire increases and fairer compensation to hunters for fuel and food expenses. *(Note this cost includes the \$2000 DOC contributed to the helicopter hire.)*

This cost increase is very competitive and expected as animals become harder to shoot in the vegetated areas and as inflationary costs inevitably add to expenses.

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Volunteer hours setting up the operation and documentation were approx. 30 hours, including communication, procedure development, health and safety development, and hunter inductions. With a further 40 hours on reporting (DOC & HfCT). Volunteer hunter commitment during the operations totaled 22.5 days across the three sites excluding onsite down time and travel to and from site. Travel time for hunters to & from the sites estimated at approx. 14 man days.

All in all in excess of 44 man days voluntary contribution to this work.

KEA & OTHER WILDLIFE OBSERVATIONS

Makawhio Upper: Kea and Falcon were observed. Makawhio Lower Kea heard, 4 Rock Wren were seen and 2 Whio below the camp flat.

Mahitahi: 2 adult and 3 juvenile Kea were observed as well as 2 Rock Wren.



Examples of Tahr browse on vegetation.

VEGETATION

Tahr impacts are still obvious as was observed by hunters in the Mahitahi where ground-based tahr population management only commenced at site in 2023.

Tahr impacts on vegetation in the Makawhio was reported to have not changed significantly since the 2022 & 2023 targeted harvest operation. However, there was no observed improvement either and it appeared

that more animals were being encountered in the bush and less animals observed above scrubline during the day.

A significant group of tahr was seen on arrival by helicopter on the lower flat and there appeared to be no significant recovery of tussock stumps from 2023. No tahr were seen on the flats during the 4-day visit though a number were shot in surrounding forests.

"Just prior to Annual Report deadlines a successful spring operation was undertaken in the Makawhio and Troyte Valleys, resulting in over 250 adult nannies controlled."

ADDITIONAL WORK UNDERTAKEN

The Department of Conservation (Haast) funded the materials for two portable toilets to be trialed in the ballot blocks for sanitary purposes. These were a design made by Dave Keen and previously installed in the Canterbury backcountry.

NZTF was able to get these flown in to the Upper Makawhio and lower Mahitahi camp sites in kit set form for no additional cost in conjunction with the management hunts. These have been installed and some positive feedback received. Lime will be placed in these on the next visits.

RECOMMENDATIONS

- Trial a spring operation in the Makawhio and Troyte Valleys where numbers appear to be still too high
- Repeat the operations again in March 2025.
- Spend one day longer if weather permits: 4-5 days per operation may be more effective.
- Consider taking a hunter with a



Upper Makawhio (Jacobs) left; Mahitahi lower site right.



well-trained indicating dog to focus on the bush area of the sites, if such a hunter/dog combo is available.

SUPPORTING DOCUMENTATION

- Community agreement (Doc – 6920217).
- Health and Safety agreement (Doc – HS0001).
- Standard operating procedure (Doc – SOP00001).

ACKNOWLEDGEMENTS

The NZTF would like to acknowledge the Department of Conservation for its approval to undertake these trials, specifically Tom Brookman and Wayne Costello for their support of the community agreement and management plans. Also for providing the non-toxic ammunition and assistance this year with some of the helicopter costs.

Thank you to the hunters who gave up their time to participate in this

trial and provided their experience and skills to target identifiable females. (Nigel Jordan; Dave Keen; Hamish Norton; Shane Hall; Jason van Beers; Derek Johnson; Bruce Hanson; Luke Care)

Also a thank you to the “Hunters for Conservation Trust” who provided \$2500 towards the cost of the management harvests.

A special thanks to Makawhio Iwi for their support of the NZTF work being undertaken in the Makawhio & Mahitahi catchments.

NOVEMBER UPDATE

Just prior to Annual Report deadlines a successful spring operation was undertaken in the Makawhio and Troyte Valleys, resulting in over 250 adult nannies controlled. More than 200kg of tahr was removed by the hunters for donation to local iwi. Mapping and detailed summaries will be available in the 2025 Annual Report.