



Targeted Harvest Annual Report 2024/25

PURPOSE

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

OPERATIONAL PLANNING 2024/25

Ground-based hunts of 3-4 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 population observed will determine

if further population management is required in the year ahead.

MANAGEMENT TARGETS

As per the NZTF Standard Operating Procedures only identifiable nannies were to be targeted. To achieve the management targets, hunting parties included a minimum of two experienced hunters, preferably one of each party having been engaged on management hunts at sites previously. Two-person parties are experienced hunters only.

SEASONAL MILESTONES:

- Reduce adult female tahr populations in the Makawhio Valley (Upper and Lower sites) as far as possible (recognising 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.
- Reduce migrating nanny tahr numbers observed in the McCullagh – Paringa headwaters
- Assess perceived nanny tahr migration in the Otoko headwater & harvest nannys observed

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. 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

"To achieve the management targets, hunting parties were to include a minimum of 2 experienced hunters preferably 1 of each party having been engaged on management hunts at sites previously."

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

As expected in Spring, poor weather plagued operational planning efforts throughout late October / early November but a single partly marginal weather window allowed these sites to be hunted on the 10th – 13th of November, just prior to the 14th Nov. cutoff date.

March 2025 weather was a little more forgiving though volunteer hunters were difficult to muster at the the windows presented.



DATA ANALYSIS

Track logs and waypoints where tahr were shot were recorded via different methods from diaries, mapping programmes on cell phones and the Tahr App. Hunter-days were calculated from the total hours hunting for the operation divided by nine (the average hours spent hunting on full days). Average nanny tahr shot per hour were calculated for comparative reporting.

SPRING 2024 SOUTH WESTLAND TARGETED HARVEST

Timing: 15th October – 14th November – subject to volunteer availability and weather.

MAKAWHIO / JACOBS

One team operating at each site (3 hunters at upper site and 2 hunters

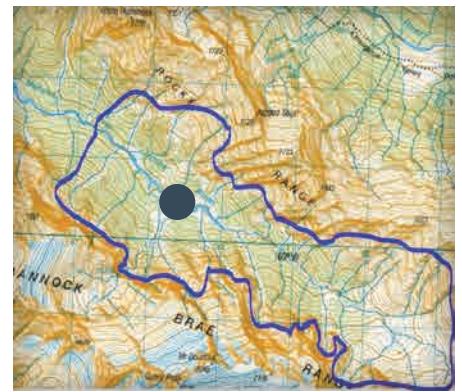
at lower landing site). The lower site is a challenging place to hunt, due to the scale of bush and alpine scrub between valley floor and alpine zone.

The upper site is less challenging to hunt but covers a much larger area, suitable for more hunters.

TROYTE

The valley was previously identified as a bull stronghold and an important recreational hunting area, but nanny populations are reported to have increased, potentially displacing bulls, hence this trial to establish numbers and methods to be successful.

Timing: 15th October – 14th November subject to volunteer availability and weather.



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



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



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

HUNTER REPORTING

At 1.35, the average tahr per hour shot was lower on average than that of the March hunts, mainly due to less nanny encounters in the upper part of the catchment.

This may indicate some improvement in the reduction of total animal numbers but also may reflect other environmental factors such as timing, seasonal distribution differences and unknown post winter AATH offset activity.

Weather conditions were cloudy on arrival on the 10th with rain that night clearing during the morning of the 11th. Some cloudy periods on the 12th, otherwise fine.

The reduction in numbers-for-effort in the Upper Makawhio, particularly true right (TR) side and TR of the Lower site, would seem to indicate either a seasonal distribution difference or that previous hunts are being effective at reducing number significantly, or a mixture of both.

Hunters are still shooting adult nannies in and around bush and scrub areas in the 7 – 14 year age bracket, but less older animals than previous operations.

Of note – significantly smaller nanny/juvenile group sizes were encountered in the upper Makawhio site compared to previous hunts, while bull numbers were similar or slightly up.

As was the case in March, hunters report increased encounters in the scrub margins and bush with less observations and encounters in the open alpine areas.

SPRING RESULTS

Operation	#Hunters	#Hours	#Hunter Days	Harvest total	Av. Per Hour
Makawhio Lower	2	57.5	6.4	91	1.58
Makawhio Upper	3	73.5	8.16	65	.88
Troyte	2	62	6.9	98	1.58
Totals	7	193	21.5	254	1.35

OBSERVATIONS VS KILLS

(OBSERVATION INCLUDES NANNY & JUVENILES)

Operation	#Hunters	Observed	Kills	% Kill
Makawhio Lower	2	184	91	49.5%
Makawhio Upper	3	131	65	49.6%
Troyte	2	187	98	52.4%
Totals	7	502	254	50.5%

By contrast, in the Troyte the vast majority of animals observed were in open alpine areas, noting that's where the hunting was focused as the lower valley is more able to be accessed by recreational hunters.

Although the kills per hunter effort in Upper Makawhio look poor by comparison to the other sites (above table) the kill rate for animals seen and encountered (overleaf table) is very similar across all three sites.

Overall, approximately 50% of nanny and juvenile tahr observed were shot (noting that a large percentage of animals not shot were juveniles and thus purposely left).

Bulls seen were recorded in diaries but not included in this report as they are not currently a target for NZTF operations.

"Of note – significantly smaller nanny/juvenile group sizes were encountered in the upper Makawhio site compared to previous hunts, while bull numbers were similar or slightly up."

A notable observation is that the majority of nannies seen and/or shot in the Makawhio were concentrated on the true left sides of the valley compared to a more balanced distribution during the March hunts.

My thoughts on this is it's a seasonal variation because the TL side was getting a lot more sun and the TR sides were still cold with little in the way of a spring flush due to less sun, with quite a bit of snow and ice,

huge avalanche filled gullies and active avalanche activity.

MARCH 2025 SOUTH WESTLAND TARGETED HARVEST

Timing – Month of March 2-3 hunters Upper Jacobs, 2 Otoko, 2 Paringa/McCullaugh

Otoko: 9th to 13th March 2025

Site was the headwaters, hunted from DOC's Otoko Ballot landing site. (see Tracking maps opposite page)

2 Volunteer Hunters: Shane Hall and Ronan Scott

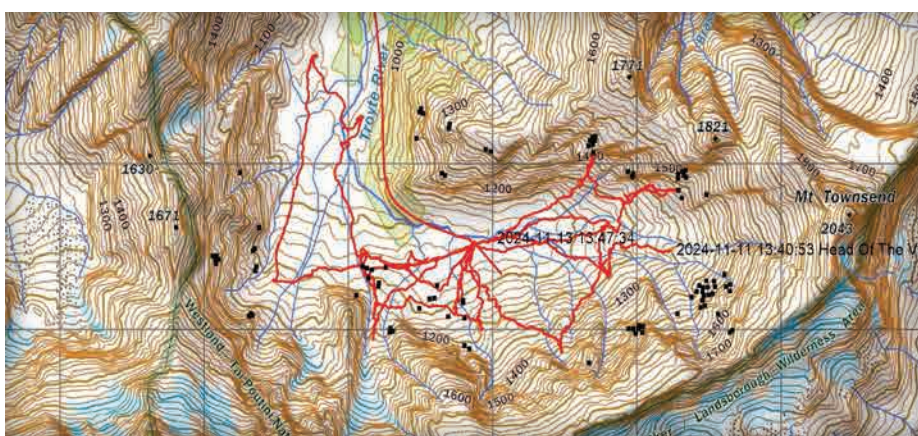
1 day lost to low cloud & rain. Hunting time restricted to 1 late evening & 2 full days hunting, however, all accessible ground was covered.

Few nanny tahr were observed and shot in this headwater catchment. The bulk of the tahr encountered were all in one side creek headwater and predominantly bulls. Little to no tahr sign was seen in bush, creeks, fans, caves or lower scrub zones.

What tahr were seen were high, on or above scrub margins. Approx 30 bulls seen approx. 50% 4-5yrs & older, 12 tahr shot (8 nanny and mistaken 4 juvenile bulls) the later accidental on new hunters' part – learning to identify young bulls which isn't always easy.



Makawhio/Jacobs 2024 spring coverage and kill locations.



Troyte 2024 spring coverage and kill locations.

43 deer were seen and 19 chamois. The majority of vegetation damage was from deer, especially noticeable on stream / gravel slide scrub margins.

Several kea & 2 Rock Wren seen.

McCullaugh/Paringa: 9th to 13th March 2025

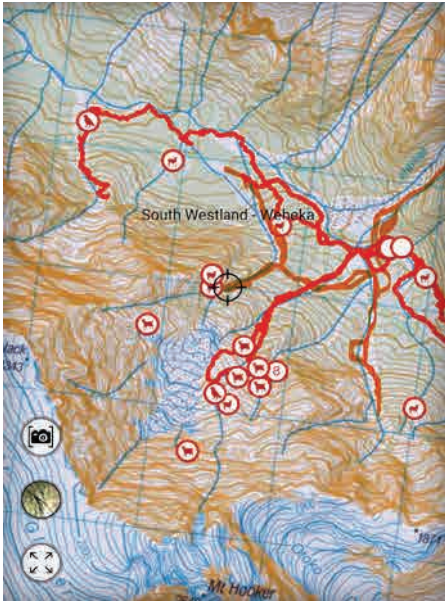
2 Volunteer Hunters: Greg & Fiona Duley

1 day lost to low cloud & rain so a late evening & 2 full days hunting

and a morning badly interrupted by AATH. 37 nanny tahr shot. More tahr encountered and observed in McCullaugh than thought to be there. 34 shot at ranges from 200 to 800yds.

A number of tahr were observed by thermal on the last morning on the Paringa side of the saddle – 3 shot but the hunt was aborted due to AATH interference.

Upper Makawhio/Jacobs: 5th to 9th March 2025. As Per map for Spring.



Otoko March tracking and kills/ observations.

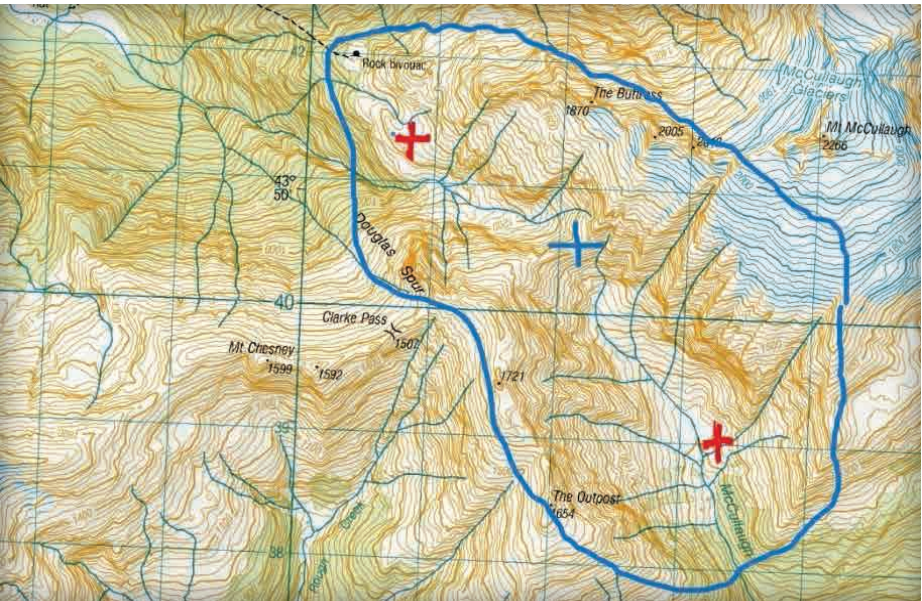
2 Volunteer Hunters: Nigel Jordan & John Royle.

Reasonably good weather allowed an afternoon, 3 full days hunting plus a morning before pick up. Similar numbers to previous autumn visits though an additional day was spent hunting with one less hunter.

Numbers seen & not shot and/or

MARCH RESULTS

Operation	#Hunters	#Hours	#Hunter Days 9hrs	Harvest	
				Harvest total	Av. Per Hour
Makawhio Upper	2	72.5	8.05	144	1.99
McCullaugh/Paringa	2	46	5.11	37	.8
Otoko	2	40	4.44	12	.3
Totals	6	158.5	17.6	193	1.03



McCullaugh/Paringa site.



McCullaugh/Paringa kill locations.

observed through a thermal, would indicate we are still treading water here.

Observations in relation to kills

would have been similar to the March results. With DOC & NZTF harvest work in neighbouring areas (Lower Jacobs, Zora & Troyte) it will be interesting to see if numbers

decrease as a result of reduced migration in the next targeted harvest hunts.

134 animals shot – included several small (late) kids.

Rock Wren, Kea & Falcon observed.

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 only animals easy to get to were photographed.

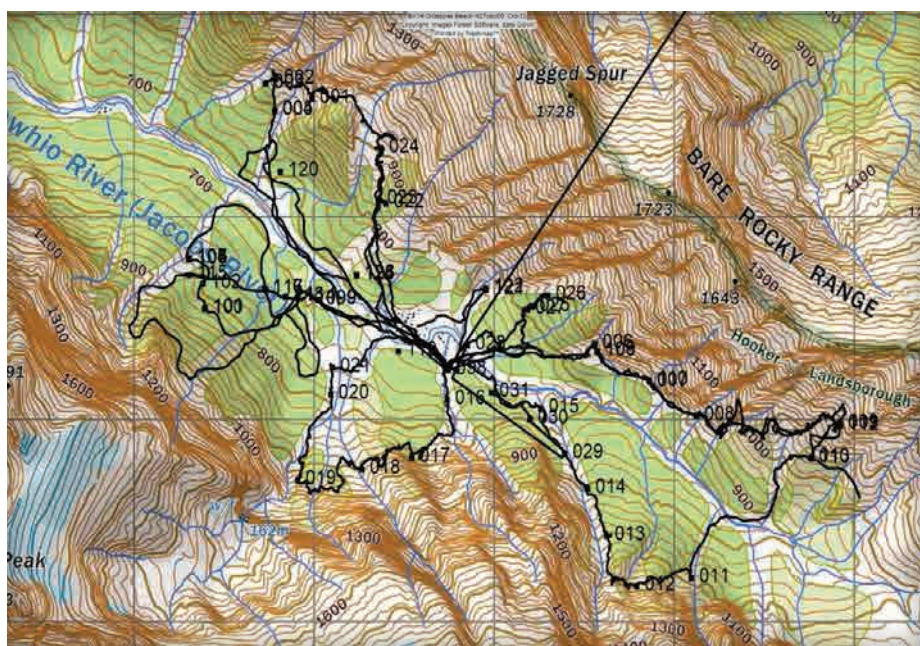
Hunters take photographs only when safe to do so and when the effort taking a photograph doesn't result in disturbance or time wastage that would reduce efficiencies.

A selection of some of the kill photos is included in the photo montage on page 17:

COSTS

Total cost of the spring operation was \$3825 (excluding GST on heli-hire). This does not include cost of ammunition, provided by DOC at no charge. This is equivalent to \$15.06 per tahr over the three sites. A small increase on the last hunt.

Cost per kill had increased in the Jacobs (\$16.50) due to reducing numbers but considerably lower in the Troyte (\$12.75) being the first



Makawhio March tracking & shooting locations to kills.

NZTF ground hunt there.

Costs of the March operations was \$4400 (excl GST) an increase on spring hunts due to increase hourly rate and longer flights to Paringa and Otoko.

Cost per tahr over the three sites was \$22.80/tahr, more expensive due to the lack of nannys to harvest in the Otoko. Excluding the Otoko the average over the Makawhio and Paringa was comparable at \$15.52/tahr

Total spring and March harvest cost: \$8225

VOLUNTEER TIME

40 hours (5 days) of volunteer time were used outside of hunting operations, in addition to the March hunts, by the hunt organizer.

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Setting up the operation and documentation were approx. 30 hours, including communication, procedure development, health and safety development, and hunter inductions.

With a further 10 hours on reporting (DOC & HFC). A similar amount of time would have been spent on organization and reporting for the March hunts, possibly



Photographic confirmation examples.



Total is conservatively, a further 68 days of voluntary contribution to this work.

KEA AND OTHER WILDLIFE OBSERVATIONS

Makawhio Upper - 6 Kea and 1 Falcon were observed and 2 Whio.

Makawhio Lower - 1 Falcon, 3 Kea and 2 Whio seen (the later below the camp flat).

Troyte - 12 Kea were observed as well as 2 Whio and 2 Rock Wren.

Otoko - Kea & Rock Wren observed and McCullaugh - 2 Kea & 2 Rock Wren observed.

VEGETATION

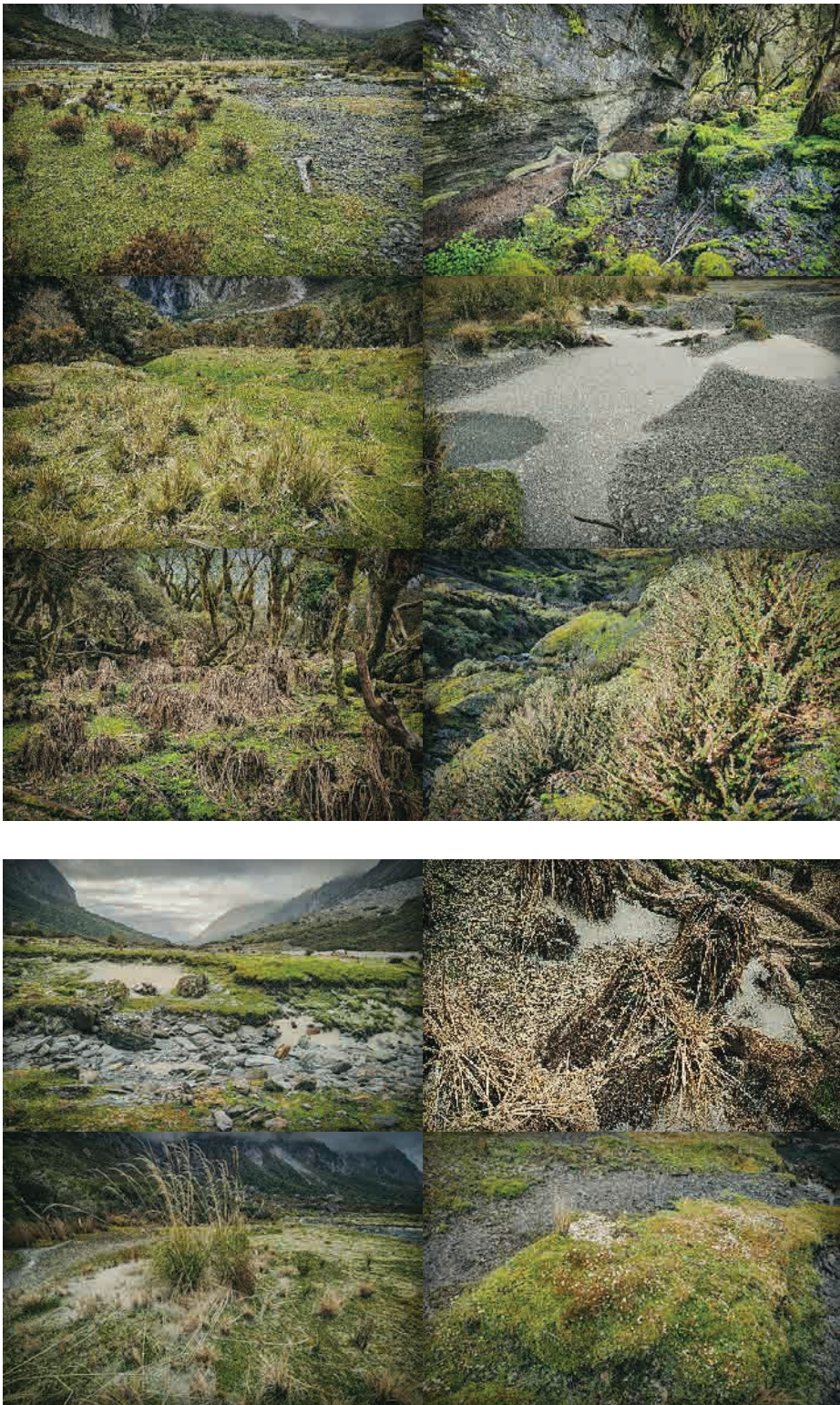
Tahr impacts on vegetation in the

more due to dual reporting for DOC and NZTF purposes (5.5 days).

Volunteer hunter commitment during the spring operations totalled 21.5 hunter days (based on 9hr day) across the three sites

excluding onsite downtime and travel to and from site. Travel time for hunters to and from the sites estimated at approx. 12 man days.

A further 17.5 days hunting and 7 days travel for the March hunters



Examples of tahr browse on vegetation.



Photos showing unusually heavy spring flowering from river flat ground cover plants in Upper Jacobs/ Makawhio – mounds of small flower seeding accumulated on the lee of banks as well as inside bush margins

Makawhio was reported to have not changed significantly since the 2022, 2023 and March 2024 Targeted Harvest operations on the TL but improvements are starting to be seen in some places on the TR.

Again, more animals were being encountered in the bush and less animals observed above scrubline during the day, except some very high on bluff faces out of range.

At the lower campsite flat there appeared to be no recovery to tussock stumps from 2023/24. Of note was some isolated bark stripping not observed before, which may be season related, was

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observed in the lower site bush (spring hunt – images RHS page 18).

No vegetation photos from the Troyte were available at time of writing this report but the snow tussock was reportedly in good condition in the upper basin of the Troyte.

The majority of vegetation impacts observed in the Otoko were from Red deer with streamside vegetation shrubs heavily impacted in places.

CONCLUSIONS & RECOMMENDATIONS

- Spring operations can be worthwhile if weather conditions permit, it seems however that effort should focus on the TL sides of the valleys due to seasonal climatic conditions, animal concentrations and snow avalanche issues on the TR sides.
- Long-range, high-powered rifles are a necessity in open headwaters and high faces,

each party should if possible have a least one capable long-range rifle and a hunter practiced at long range shooting.

- Makawhio/Jacobs needs continuing attention to achieve reducing target harvest numbers and achieve some vegetation recovery. Also worth trialing a partial Upper Jacobs operation in March i.e. 2 hunters in the upper Jacobs basin (new site in the headwaters) to cover ground not undertaken in spring due to bull concentrations and to maximize benefits of on-site early morning/evening hunting time.
- Revisit Troyte in either spring 2025 or March 2026
- Consider trialing a hunter with a well-trained indicating dog to focus on the bush area of the sites, if such a hunter/dog combo is available (Mahitahi and Lower Jacobs).
- It is difficult to explain the lack of nannies in the Otoko – possible slow migration there or AATH offsets being very successful in the high alpine zone. Based on the small number of nannys observed in the Otoko a revisit could be left for 3 – 5 years.
- Paringa/McCullaugh maybe worth a revisit in a year or two if able to accommodate after the other priorities are on track (Jacobs, Mahitahi and Troyte).
- It would be very useful if DOC could inform AATH operators where and when we are operating in future to avoid disturbance, though it is

acknowledged this would often be short notice.

SUPPORTING DOCUMENTATION

- 2025 DOC/NZTF Community agreement
- Health and Safety agreement
- Standard operating procedures
- Field Safety Information sheets (FSI's)

ACKNOWLEDGEMENTS

The NZTF would like to acknowledge the Department of Conservation for its approval and support to undertake these trials over the period of the first Community Agreement, specifically Tom Brookman and Wayne Costello. Also for arranging approval for work in the Troyte Valley of Westland National Park (WNP) and for providing the non-toxic ammunition.

A further thanks to the hunters who gave up their time to participate in the spring and March nanny harvest for providing their experience and skills to target identifiable females. (Nigel Jordan; Johnny Royle, Dave Keen; Hamish Norton; Shane Hall; Ronan Scott; Cam McKay; Derek Johnson; Greg & Fiona Duley)

A special thanks to Makawhio Iwi for their ongoing support of the NZTF work in South Westland.

S. B Hall (NZTF Committee member and South Westland Targeted Harvest organizer).