Submissions Analysis
Tahr Control Operational Plan
2020/2021
Reconsideration

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Phoenix Facilitation
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SUMMARY OF SUBMISSIONS

Legal

Overview: **Submissions commented on the law and binding policies that pertain to the decision on the Tahr Control Operational Plan 2020/2021.**

General arguments were:

- **Tahr are an historic and recreational resource that should be recognised and protected on Public Conservation Land.**
- **That the legislation, and therefore operational management, is misguided in its focus on indigenous biota and should be reviewed.**
- **Co-governance with Ngāi Tahu is not clearly required by the law or binding policy.**

Objectives of control: **Three submissions commented on the objectives of control. One argued for equal recognition of commercial and recreational opportunities with environmental protection. Another drew attention to the operative sections of general policy and park management plans to say the opposite; that tahr should be exterminated in national parks and carefully controlled elsewhere. A third argued for the primacy of protecting indigenous biodiversity and upholding the law as it is written.**

Moving tahr: **One submission argued that it was within the legal mandate of DOC to transport bull tahr out of national parks rather than shoot them there.**

Responsibility: **One submission asserted that it is solely the responsibility of DOC to manage tahr, not hunters.**

Relevant Binding Plans and Policies: **One submission provided a comprehensive list of the binding policies and plans that should be considered.**

Tahr numbers

Overview: **Many submissions commented on tahr numbers and what we do, or do not, know about them. Some believed numbers were certain to still be too high and the proposed control was necessary. Others believed that the level of control proposed could result in very low numbers of tahr. There was concern about the accuracy of estimates, and that the operational plan failed to consider population data and modelling provided by some stakeholders.**

At which intervention is required: **One submission made a farming practice analogy to draw attention to the value of a healthy landscape in maintaining a healthy tahr herd.**

Population data: **Two submissions particularly focused on the accuracy of data on tahr populations and how their numbers and demographics might be responding to hunting, control, and environmental factors. One gave detailed prescriptions for the sort of data that should be gathered.**

Uncertainty in numbers: **These same two submissions went on to describe the role of population projections in making operational decisions and expressed concerns about an approach DOC appears to have taken but has not explained.**

Male/female ratios: **Three submissions provided detail about the importance of male/female ratios in operational decisions on control. They believed the bias produced by selectively controlling females had not been sufficiently considered in operational decisions.**

Population growth rates: **One submission argued that the decision on levels of control for the operational plan was based on unrealistically high population growth rates of tahr. They said that such rates could not be achieved by male-biased herds in less than ideal conditions.**

Control effort

Overview: **Submissions commented on the need for control and level of effort required. One said they had been pressing for the level of effort shown in the 2020/2021 for many years and appended copies of letters to the Minister of Conservation to that effect.**

Needed to implement HTCP 1993: **Views differed on whether the Tahr Control Operational Plan 2020/2021 set an appropriate level of control effort given current circumstances. One said that control in recent years will have reduced numbers to levels where further control is not required. Another suggested the approach should focus on areas of high density and areas of high natural value.**

How control should be achieved: **Most comment was made on how control should be achieved and where effort should be focused. One said that *there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination. Because of: the demographic effects, the opportunity cost of culling bulls, the lack of an environmental imperative to immediately eliminate all tahr from the national parks, and the recreational and commercial benefits to the hunting community from them harvesting the remaining bulls.***

Of note is the comment that *about half of the proposed control hours in MU4 have been undertaken already. To allow hunters access to some tahr hunting in this MU, and for them to make a contribution to controlling bulls, the remainder of the control work in this unit should be postponed until June 2021. If bulls must be shot, and recreational hunters and guides are unable to do so in time, then it is most efficient to consider commercial uses of them, rather than shooting to waste. Where it prevents shooting to waste, the Council recommends consideration of commercial live capture, cape harvest, WARO or other uses from aerial harvest.*

Several submissions advocated focusing on nannies. One summed it up thus: ***culling nannies not only reduces the herd size now (as does culling bulls), but it has two future effects that are different to bull culling:***

- ***longer suppression of the population because nanny tahr live much longer (bulls not shot are more likely to die of natural causes than are nannies)***

- ***a reduction in future recruitment (only nannies have kids and their productivity is essentially independent of bull numbers)***

The Tahr Control Operational Plan 2020/2021 had this focus outside of national parks. The operative decision would be whether to reinstate it for control inside the national parks.

Priority areas: **The Tahr Control Operational Plan 2020/2021 did not have this level of detail on priority areas. One submission suggested a *focus on national parks and getting numbers down as far as practicable and then focus on the two wilderness areas, the Hooker, Landsborough and the Adams.***

Another suggested as focus locations: *True left of the Copland round to Misty Peak , true left bottom of Horace Walker, Douglas/Clue to Lame Duck Flat, True left of Callery, Waikukupa and Omoeroa faces, Cook River.* In setting such detail, if it is done, regard should be had to comments in other sections on areas important for recreational hunters and WARO.

Timing of control: **Comment was also made about timing of control: *The Operational Plan was silent on when operations would take place. Late winter/spring are the times when there is least disruption to the hunting sector, and other backcountry users. Snow conditions at these times facilitate culling. Animal welfare considerations mean there should not be any control work from mid-November until the end of February. Delaying remaining control work in MU4 to June 2021 is desirable. Significant reductions in tahr numbers in MU4, particularly of males, will mean there is little incentive for hunters to be there at that time, mitigating the adverse effects anticipated if control work were undertaken at that time in other MUs. It would also provide the opportunity for hunting in the interim.***

Another submission elaborated: *DOC culling should be done in July AUG Sep when most hunters have finished and before nannies have kids, do the culling in July away from where hunters will be, Wilderness Tahr Blocks should start first weekend of May and finish 2nd weekend of July,7.*

WARO and AATH: **Specific comment was made about WARO in several submissions such as: *the Department must make it easier for WARO operators to be able to operate, adding tahr (excluding identifiable bulls) to the existing WARO permit with spatial and temporal provisions to prevent conflict in April, May, June, is the necessary first step.***

1. ***Put Tahr on normal WARO permit with conditions.***
2. ***DOC culling to be done July AUG SEP, July away from where there will be hunters.***
3. ***No culling, WARO or AATH within 1 KM of Huts or Known Campsites***
4. ***Wilderness Blocks should be 1st weekend May to 2nd weekend of July***

Control of bulls: **Opinion in submissions was split regarding bulls being controlled in national parks. The arguments for controlling bulls were predominantly compliance with relevant law and policy. A secondary argument was that national parks have important indigenous biota vulnerable to tahr. The arguments against controlling bulls in national parks were:**

- **Bull tahr are highly valued by hunters.**
- **Bull tahr are a drawcard for hunters, leading them to control tahr and other exotic species.**

- **Bull tahr lead to additional support of the commercial hunting industry as international hunters will choose NZ (rather than other countries) to hunt red deer because of the concurrent opportunity to hunt tahr.**
- **Controlling bulls is unnecessary in controlling overall populations as their numbers are irrelevant to recruitment.**
- **With enhanced access recreational and commercial hunting could achieve management without official departmental control.**
- **There are no documented adverse effects on rare or threatened plants from tahr in the parks.**
- **Bull tahr have high natural mortality.**
- **If nannies are removed bull tahr will leave of their own accord to seek mates.**

Effort and setting targets: **Some submissions wanted operational plan targets expressed as numbers of tahr to be controlled, or the number of tahr to remain after control. These also wanted more specification at the management unit level. The arguments for these additions were that:**

- **The control plan refers to tahr numbers and so should the operational plan.**
- **It would assist hunters to know what was being sought in each place.**
- **Reasons could be given for the targets adopted, increasing understanding.**
- **Stopping points for control could be identified in each place.**
- **The intervention densities should be the stopping point for control.**

Control in national parks

Overview: **Submitters were divided as to whether it was desirable to pursue control of tahr to zero density in national parks.**

Arguments for doing so were:

- **National parks provide a safe haven for New Zealand's native species.**
- **It is required by the National Parks Act, policy, and management plans.**
- **Tahr numbers are in excess of the targets set in the Himalayan Thar Control Plan 1993.**
- **It will provide opportunity for Aotearoa's biodiversity to thrive, ensuring the enjoyment of the National Parks and the Southern Alps for generations to come.**

Arguments against were:

- **It creates unnecessarily different approaches for different classes of Public Conservation Land.**
- **There does not appear to be any environmental imperative to immediately remove all tahr from the national parks because of:**
  - **Demographic effects.**
  - **The opportunity cost of culling bulls.**
  - **The recreational and commercial benefits to the hunting community from their harvesting the remaining bulls.**
  - **The loss of benefits of free control from recreational hunters who will no longer hunt in national parks if they have little/no chance of a successful trophy hunt.**

- **Reducing opportunities for recreational hunters in the national parks would increase recreational hunting pressure in other MUs and lead to resurgence in conflict between the recreational and commercial hunting sectors.**

One submission said that control in national parks should exclude hunter landing site areas and areas around all huts and tracks (3km buffer).

Control outside of national parks

Overview: **Submissions were united on the priority of preventing tahr range expansion. Only the hunting submissions focused on details of what should occur in the management units outside the national parks. One submission said that there is priority to target and eradicate tahr on pastoral leases outside the feral range, in accordance with the Himalayan Thar Control Plan 1993.**

Outside the feral range and in exclusion zones: **All submissions that commented agreed that preventing range expansion was the highest priority for control of tahr. Some submissions said that all further effort in the 2020/2021 period should be focused in these areas.**

In other Management Units: **Within Management Units outside the national parks, hunters generally advocated decreasing the amount of official control from that set out in the Tahr Control Operational Plan 2020/2021. The reasons provided were:**

- **No species are confirmed to be threatened or at risk of extinction from the current densities of tahr.**
- **There are no updated scientific measurements to indicate densities exceed thresholds.**
- **The large number of tahr removed over the past two years has resulted in a considerable population reduction.**
- **Official control may not be required to achieve the Himalayan Tahr Control Plan 1993 targets as ongoing reductions following female biased harvest have yet to be realised.**

Two submissions provided detailed recommendations at the Management Unit level. In summary they said:

- **MU1: Reduce hours of control in MU1 pending monitoring of post-cull tahr density. Areas that are readily accessible to recreational hunters should not receive DOC control. Priority locations for official control are difficult to access areas where recreational hunting has least effect.**
- **MU2: One submitter said limited control as population is now low. Another submission said planned control would not reduce population to Himalayan Thar Control Plan 1993 intervention density. Control certain areas after further liaison. Target females, juveniles and non-identifiable males. Reduce female-kid groups to 10. DOC aerial control priority locations: Aciphylla Creek faces, true left of Lambert Creek, Willberg Range around Avalon Peak, Adams Range northern faces, Bettison Faces, true left of the Perth below the Scone.**
- **MU3: One submission said the proposed control is unlikely to reduce populations to Himalayan Thar Control Plan 1993 intervention density. Another said some official control is needed in areas inaccessible to recreational hunters. Target females, juveniles and non-identifiable males.**

Reduce female-kid groups to 10. Areas that are readily accessible to recreational hunters should not receive DOC control. Priority locations for official control are difficult to access areas where recreational hunting has least effect.

- **MU5: Some official control is needed. Target females, juveniles and non-identifiable males. Reduce female-kid groups to 10. DOC aerial control priority locations: Ben Ohau Range, Neumann Range.**
- **MU6: Some official control is needed in the inaccessible areas to recreational hunters. However, substantially reduce the planned control because the current proposal will reduce the tahr population well below the Himalayan Thar Control Plan 1993-specified target. DOC aerial control priority locations: true left of Jacobs, parts of the Landsborough (e.g. Zora).**
- **MU7: Cancel the planned control.**

Social and economic

Overview: **Submissions from hunters focused on the value of tahr as a trophy big game animal. It was said that tahr are now the most important big game trophy in New Zealand to recreational hunters. Tahr were also cited as a food source. Some argued that hunting is a legitimate recreational and commercial activity. They said that shooting bulls now has adverse effects for commercial and recreational hunters.**

COVID-19: **A key part of the context noted in submissions was the COVID-19 pandemic and its effects on tourism, including guided hunting. It was suggested that international hunter bookings will carry forward (rather than being cancelled) and therefore many more tahr will be hunted at once when the borders reopen. One submission discusses the potential for Jobs for Nature employment for hunters. They also note there will be no international hunting control this year, with the implication that official control is therefore more important.**

Relationship with the hunting sector: **Multiple submissions discuss loss of trust with DOC and/or a worsened relationship between DOC and the hunting sector. Submissions included that hunters have a unique stakeholder relationship in that they are part of implementation of the plan, the perception that DOC has "fostered the establishment of businesses around the tahr resource and has profited from concession fees & AATH offsets", and connections between hunter trust and willingness to provide data, including through the Tahr Returns App.**

Hunters as conservationists: **Multiple submissions discuss the contribution of the hunting sector to conservation initiatives. Some submissions note that as the relationship with DOC worsens, hunters will contribute less to conservation and, conversely, that working with hunters as a conservation resource will enable realisation of aspects of tahr control and research which have not been realised to date.**

Effects on recreational hunting: **One submission said that a failure to implement the Himalayan Thar Control Plan 1993 has resulted in an increase in availability of tahr for commercial and recreational use, with consequent legitimate expectations of continued access. It was said that livelihoods and a way of life were under threat. Recreational hunters said the majority of their tahr hunts are conducted on public**

conservation land. Some commented on the direct effects of control on hunters. They said the level of control proposed has the potential to damage DOC's relationship with landowners and hunters.

Effects on commercial operations: **Tahr were said to be a draw card that also benefits other parts of the commercial hunting industry (e.g. red deer trophy hunting). Commercial operators said the vast majority of 2020 booked hunters have deferred or rescheduled their hunts until after the border opens. Bulls are of high commercial value, which will be important for COVID recovery. They said the total value of each mature bull tahr represents $14,000 to the commercial hunting industry. This is the sum of the trophy fee, guiding fees, lodging, taxidermy and trophy export. They argued that the industry needs to be able to incrementally adjust to any changes to the tahr herd dynamic. Conversely, one submission said many tahr would be left for hunters after control operations.**

Disturbance: **Some submissions said DOC contractors have recently shot tahr in the immediate vicinity of hunters. They state there is also potential for control operations to disrupt other Public Conservation Land users. They note this may reduce recreational hunters' willingness to use the Tahr Returns App.**

Long-term plan

Overview: **One submission said a long-term plan that sets out how control parameters will be met needs to be completed as a matter of priority.**

Review of Himalayan Thar Control Plan 1993

Overview: **Two submissions (and one other organisation in support) argued that the Himalayan Thar Control Plan 1993 is outdated and needs to be reviewed. The arguments were:**

- **To reflect modern expectations and provide consistency across the statutory and policy framework (to remove the requirement for zero density in national parks).**
- **To enable all user groups and stakeholders to reengage in constructive consultation to ensure tahr are effectively managed and conservation values upheld.**

Process

Overview: **Submissions commented on the process involved in forming the Tahr Control Operational Plan 2020/2021 and on processes more generally involved in the management of tahr.**

Tahr Control Operational Plan 2020/2021 process: **Several submissions said that any comment they made before being informed of the department's proposed quantum of control should be set aside. Hunter submissions said the process for 2020/2021 had led to a loss of trust in the department. Some said that the department should have provided more information and clearer explanations of its proposals. Several had concerns that they could not properly submit without knowing about the control operations completed after 1 July 2020.**

Tahr management process: **One submission affirmed principles set out by the department in the 2018 operational plan. Others referred to the inter-relationship of tahr control and the value of hunter goodwill in wider conservation activity, including maintaining huts and dealing with pests. One submission proposed that DOC introduce a dedicated tahr liaison staff member, based in an office near the tahr herd, who is mandated to carry out effective recreational hunter and hunter organisation liaison. This submitter also requested that DOC comply with the reporting prescription set out in Appendix 8 of the Himalayan Thar Control Plan 1993. Mention was made of potentially contracting hunters to undertake control as provided for in the Himalayan Thar Control Plan 1993. One said that all official control should be by heli-operators, with no ground hunters. Extending the tahr ballot period was also proposed.**

Biodiversity

Overview: **All submissions that commented on indigenous biodiversity affirmed its value but differed on whether it was being affected by tahr. One argued for tahr to be recognised as a valued part of biodiversity in New Zealand.**

Indigenous: **Some said there was no certain information on the density of tahr that would cause adverse effects on native vegetation. They stated there is no imminent threat, either to the environment or of a significant tahr population increase, that would support the need for urgent action. Conversely, another said native flora are ill-equipped to defend against these grazing mammals. The grazing behaviour of tahr, they said, damages endemic flora, such as tall tussock, Mount Cook buttercup, NZ veronica, and Godley's buttercup, which is classed by the NZ Plant Conservation Network as threatened and nationally endangered. They said this damage has lasting implications for a variety of fauna, including insects, moths, birds, and alpine lizards.**

Tahr: **One submission argued that tahr are listed as a near threatened species on the IUCN Red list and that New Zealand is the last stronghold of tahr. Another said the failure of other countries to conserve tahr should not lead to allowing them to adversely affect native biota here. They did comment that tahr farming in New Zealand might help with conservation of tahr in the Himalaya.**

Research and monitoring

Overview: **All submitters that commented on research and monitoring agreed that an integrated research and monitoring programme for tahr was essential. Some argued that the most immediate need was for accurate information on tahr populations, including densities and age and sex data in management units #1, #2, #3, #5 and #6. Vegetation condition monitoring was affirmed as a priority, but submitters accepted that this would take some years to show significant trends. One said that it was important to gather accurate information on the control exercised by recreational hunters.**

LINZ land

Overview: **Submitters that commented on this subject said that accurate tahr population information on land managed by LINZ was essential. Professional guides noted that control operations on these lands could compound the effects of tahr population reductions on Public Conservation Land. One submitter indicated that the possibility that current work could lead to control on these lands was affecting the level of concern about control on Public Conservation Land.**

INTRODUCTION

To support reconsideration by the Department of Conservation of the Tahr Control Operational Plan 2020/2021, twelve stakeholder organisations made verbal submissions on 3 August 2020 in Christchurch (one of these did not in addition provide a written submission).

Thirteen written submissions were subsequently also made by invited stakeholders. Eleven of the written submissions were from organisations that had previously made verbal submissions and two were from organisations which had not.

Stakeholders had been informed that, unless otherwise requested, written submissions would supersede verbal submissions. Three of those making written submissions indicated that these were in addition to their verbal submissions, rather than superseding them.

There are thus 14 submissions to be considered in total, as follows:

F&B (1)	Forest and Bird
(2)	
Mt Cook Trophy Hunting (3)	Mt Cook Trophy Hunting Ltd
NZGPHA (4)	NZ Professional Hunting Guides Assn
GAC (5)	Game Animal Council
NZCA (6)	NZ Conservation Authority
(7)	Fox & Franz Heliservices
NZTF (8)	NZ Tahr Foundation
SCI (9)	Safari Club International NZ
CACB (10)	Canterbury Aoraki Conservation Board (endorsed by West Coast Tai Poutini Conservation Board)
LINZ (11)	Land Information NZ
NZDA (12)	NZ Deerstalkers Assn
NZAGE (13)	NZ Assn of Game Estates
FMC (14)	Federated Mountain Clubs

Submissions analysis has included both written and verbal comments only where submitters indicated this should be done, or where no written submission was received.

Every paragraph of written submissions was considered and coded for relevance to sections defined for a decision document on the reconsideration of the Tahr Control Operational Plan 2020/2021. A similar approach was taken for verbal submissions using the text record made on the day. Where a PowerPoint presentation was provided the text from that has been included as well. Where the meaning was not clear from the written record a check was made from the day's audio recording.

All relevant text blocks were then copied into this analysis and natural groupings were used to create subsections. Key matters from each section were then summarised under subheadings and are presented at the beginning of each section. Where submitters had attached substantial additional material, such as whole reports, letters, and maps, these were considered as supplementary to understanding their arguments. Text from this material is not captured in the submissions analysis per se.

1 LEGAL

Overview: **Submissions commented on the law and binding policies that pertain to the decision on the Tahr Control Operational Plan 2020/2021.**

General arguments were:

- **Tahr are an historic and recreational resource that should be recognised and protected on Public Conservation Land.**
- **That the legislation, and therefore operational management, is misguided in its focus on indigenous biota and should be reviewed.**
- **Co-governance with Ngāi Tahu is not clearly required by the law or binding policy.**

Objectives of control: **Three submissions commented on the objectives of control. One argued for equal recognition of commercial and recreational opportunities with environmental protection. Another drew attention to the operative sections of general policy and park management plans to say the opposite; that tahr should be exterminated in national parks and carefully controlled elsewhere. A third argued for the primacy of protecting indigenous biodiversity and upholding the law as it is written.**

Moving tahr: **One submission argued that it was within the legal mandate of DOC to transport bull tahr out of national parks rather than shoot them there.**

Responsibility: **One submission asserted that it is solely the responsibility of DOC to manage tahr, not hunters.**

Relevant Binding Plans and Policies: **One submission provided a comprehensive list of the binding policies and plans that should be considered.**

2.0 OVERVIEW

GAC (5)

In her letter of expectation, The Minister of Conservation has directed the Game Animal Council to work with the Department of Conservation and others to develop a plan that will support DOC to bring the tahr population within the limits of the 1993 Himalayan Thar Control Plan (HTCP). The Minister has also requested the GAC recognise the interests of hunting sector stakeholders, the significance of biodiversity, and the need to avert decline in indigenous species. The Minister has asked the GAC to continue to manage competing interests and to nurture the goodwill of the hunting sector towards conservation.

The purpose of the current consultation is to assist with design of the 2020/2021 annual operational tahr plan that contributes towards achievement of objectives specified in the HTCP. To that end, this advice addresses only the 2020/2021 operational plan (Henceforth "Operational Plan"), which seeks to reduce tahr numbers on Public Conservation Land, and not the HTCP per se. However, the Council appends some points for context and consideration in future HTCP-related decision making.

Nothing was found appended.

SCI (9)

The legalities of legislation have been quoted again and again. However, the ambiguity of the judge's conclusions i.e. can but not must, is a clear display of the purpose of legislation, as only a guide for managers. Legislation is designed this way to allow for technical discretions to be made. Certainly, page 41 HTCP as quoted above shows this.

We note in the meeting that Forest and Bird admitted to being an integral part of the formation of legislation pertaining to conservation estate. SCI therefore contests that a significant imbalance in the formation of legislation has occurred, and that legislation needs to be updated to support all of the New Zealand public, not just one stakeholder. Particularly one that functions as nothing other than a stick to its self-placed legislation and long-term agenda. SCI is pleased to hear Forest and Bird have accepted that tahr are here to stay and that 10,000 is acceptable. However, whether they choose to listen to the advice of science and good management for the protection of our biodiversity and quality of life in the long term is yet to be seen. Despite the Forest and Bird biases within the legislation, there is room for interpretive differences.

Below is an example of an alternate interpretation within the Conservation Act 1987 and relevant policy. This can be provided for all the legislation in an extensive and comprehensive way. However, in this submission we seek to be concise and so provide only one part to serve as an example. 2

General Statutory Context

1. Conservation Act 1987

"Conservation means the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations."

"natural resources means-
(a) plants and animals of all kinds; and
(b) the air, water, and soil in or on which any plant or animal lives or may live; and
(c) landscape and landform; and
(d) geological features; and
(e) systems of interacting living organisms, and their environment; and includes any interest in a natural resource"

The Himalayan Tahr is by definition of the Conservation Act 1987 a natural resource. Policy 13a CGP 2005 calls for such natural resources to be defined.

"Conservation management strategies and plans should include identification of: i. natural resources, historical and cultural heritage, and recreational opportunities, at specific places on land and water…"

The preservation and protection of natural resources is required by the Conservation Act 1987.

Preservation, in relation to a resource, means the maintenance, so far as is practicable, of its intrinsic values

Protection, in relation to a resource, means its maintenance, so far as is practicable, in its current state; but includes—

(a) its restoration to some former state; and
(b) its augmentation, enhancement, or expansion

The second part of the definition applies specifically to tahr in that they are recreated and appreciated by the public. The point under dispute is in regard to the extent and logistics of "safeguarding the options of future generations"

While "protection" allows for a return to "some former state," it also provides the option for "enhancement." The term "enhancement" by definition is an increase or improvement in quality, value, or extent. This allows for improvement to quality, value and extent of Himalayan Tahr, for which the hunting sector only seeks within the bounds of their current feral range.

53 Powers of Director-General,

3) Without limiting the generality of subsection (1), the Director-General—

(g) may control any introduced species causing damage to any indigenous species or habitat.

The term "control" is not defined by method or extent within the Act. Therefore, both the method and extent of control are up for debate and arguably at the centre of the current opposing views within the bounds of the HTCP.

The term "damage" is not defined in the Act. All species, indigenous or introduced, could potentially "cause damage" on some level to another species or habitat by their presence. To apply this generalised policy "damage" must be defined and the hunting sector require the Department to do so in a way that is quantitatively measurable and relevant across time and space, as part of the reasoning given for decisions made on the final operational plan as per requirement of the court decision. In addition, each indigenous species where "damage" identified results in control of another natural resource should be specified and the Departments expectations for its "protection" as per the Conservation Act 1987 interpretation. 2

Management planning documents

Policy 4 of the CGP refers to pest management programmes.

The Biosecurity Act 1993 is the only statutory Act which actually defines "pest"; an organism specified as a pest in a pest management plan.

With regard to the Biosecurity Act 1993, there is not a "pest management plan" for tahr. The HTCP 1993 rather is a Wild Animal Control plan for the management of Tahr and does not qualify tahr as a pest under the Act.

wild animal as per WAC Act 1977

(a) Means

a. any deer (including wapiti or moose):
b. any chamois or tahr:
c. any goat that is not
i. held behind effective fences or otherwise constrained; and
ii. identified in accordance with an animal identification device approved under the National Animal Identification and Tracing Act 2012 or in accordance with an identification system approved under section 50 of the Biosecurity Act 1993 and approved by the Director-General for the purposes of this Act:
The CGP gives the definition of pest as "Any organism, including an animal, plant, pathogen or disease, capable or potentially capable of causing unwanted harm or posing significant risks to indigenous species, habitats and ecosystems or freshwater fisheries."

There are a number of issues with respect to this definition being but not limited to;

(1) All species, including indigenous species, may be considered as pests, and no ranking is currently defined.
(2) All species are potentially capable of unwanted harm.
(3) What constitutes unwanted harm is not defined and the word "unwanted" is subjective.
(4) Significant risks are not defined in this document. The word significant is not subjective. Its definition is required to allow for application to decision making.

The points of relevance to tahr in the CGP follow;

4.2

(e) Commercial hunting of wild animals and animal pests should be encouraged to maximise the effective control of them, while minimising any adverse effects of hunting on planned outcomes at places.
(f) Recreational hunting of wild animals and animal pests should be encouraged where this does not diminish the effectiveness of operations to control them and is consistent with planned outcomes at places.
The wording "wild animals and animal pests" within the CGP gives distinction between the two. Wild animal is defined clearly in Conservation Act 1987, but the criteria to be considered an animal pest is not clear. If wild animals are automatically identified as pests then no distinction would be made. "Maximising effective control of them" is subjective, in what is effective control of a wild animal species.

FMC (14)

Co-governance between DOC and Ngai Tahu has been cited again– questions whether it needs to be there – governance is a statutory thing - non-statutory plan here. General Policy partial review process just underway and this might pre-judge the case.

1.1 OBJECTIVES OF CONTROL

[redacted] (2)

2. [redacted] recognises and supports the need for the Tahr Control Operational Plan 2020/21 to protect the natural environs within and outside the Feral Range as defined in the Himalayan Tahr Control Plan 1993 (Plan). But [redacted] also recognises and understands the commercial benefits and recreational enjoyment that come from hunting and photographing tahr within that natural environment. The Tahr Control Operational Plan 2020/21 when combined with successive control operations should not set out to achieve one without recognition of the other.

CACB (10)

The operative Aoraki Mount Cook National Park Management Plan is clear about exterminating or controlling introduced fauna in, and adjacent to, the National Park, and is specific about tahr: policy 4.1.5(b) is "to exterminate tahr within, and actively control tahr adjoining the Park." (page 57).

The Canterbury (Waitaha) Conservation Management Strategy natural heritage policy 1.5.1.16 is also clear: "Contain Himalayan tahr within the feral range set out in the Himalayan Tahr Control Plan 1993 and seek to ensure that new populations of wild animals and pest animals are not established." (page 32).

FMC (14)

Conservation is hard. Humans like to fiddle with stuff. Always trying to improve on nature. Take more than our share. FMC affirms conservation legislation – preservation in perpetuity for intrinsic worth. We affirm nature's right to simply be. This is what conservation legislation is about. Correcting NZDA reference to rebuilding the plane. Lack of specific information is not a reason to not get going. – no reason to not get going on this work – research. Be lawful is what FMC would say. National Parks Act – no introduced species. Conservation Act is less intolerant of introduced species. That is where an equipoise is allowed. The 1993 did this but clumsily.

Value of people in the hills – recreation challenge and endeavour, solitude. May have expectations not fulfilled. About food gathering too. Financial message questionable. Conservation legislation has no economic mandate. Human factor – significant disappointment. Be kind.

Human colonisation has altered Aotearoa in a very short time. Nature far more depauperate.

Cons Legislation is a compact between New Zealanders and our whenua and the conservation legislation enshrines corporate self restraint. The law must be upheld. And be kind.

1.2 Moving Tahr

Mt Cook Trophy Hunting (3)

We would add to that - 'OPERATION RELOCATION', with the concept that the majority of mature bulls be relocated to safari parks / game farms / tahr farming operations as part of the management package to supply the commercial hunting industry in the future. This would save the tragic waste of resource as is happening at the moment and gain some order of common sense with the commercial hunting industry, the public and the tax payers. It was confirmed at the meeting held on the 3rd August 2020 in Christchurch, DOC has the discretion (legally) under the act to do so and even Forest and Bird recorded they are happy with control – not elimination or extermination.

1.3 Responsibility

GAC (5)

The Council notes the strong public interest in tahr management resulting from recent and ongoing legal actions, which has generated heated opinions on both sides. Some commentators have opined, "hunters have failed". The Council refutes that rhetoric and wishes to see it corrected. The HTCP is clear where responsibility lies. With the exception of AATH offsets, the hunting sector does not have an obligation to monitor or control tahr numbers, the Department does. Despite that, the Tahr Interest Group has a long history of organising tahr culls at the participants' own expense in locations directed by the Department. Recreational hunters kill large numbers of tahr for which they do not receive recognition. The provisions in the HTCP that transfer responsibility for tahr control to hunters (Section 5.1) have never been applied.

The Game Animal Council Act provides an opportunity to change hunting sector responsibility through establishment of herds of special interest. The New Zealand Tahr Foundation was established with that express purpose. However, that opportunity has been removed against the hunting sector's wishes. Like many other objectives, COVID-19 has prevented the commercial hunting sector from removing bulls from the national parks this year, which was part of the 2019/2020 operational plan. That is not a failure by the hunting sector, it was completely outside their control.

1.4 Relevant Binding Plans and Policies

NZCA (6)

8. The NZCA submission is based on their analysis of:

- *Tahr Control Operational Plan 2020-2021*
- *Himalayan Tahr Control Plan 1993*
- *Conservation Act 1987*
- *National Parks Act 1980*
- *Wild Animal Control Act 1977*
- *Conservation General Policy 2005*

- *West Coast Conservation Management Strategy*
- *Canterbury (Waitaha) Conservation Management Strategy*
- *Aoraki/Mt Cook National Park Management Plan*
- *Westland/Tai Poutini National Park Management Plan*

2 TAHR NUMBERS

Overview: **Many submissions commented on tahr numbers and what we do, or do not, know about them. Some believed numbers were certain to still be too high and the proposed control was necessary. Others believed that the level of control proposed could result in very low numbers of tahr. There was concern about the accuracy of estimates, and that the operational plan failed to consider population data and modelling provided by some stakeholders.**

At which intervention is required: **One submission made a farming practice analogy to draw attention to the value of a healthy landscape in maintaining a healthy tahr herd.**

Population data: **Two submissions particularly focused on the accuracy of data on tahr populations and how their numbers and demographics might be responding to hunting, control, and environmental factors. One gave detailed prescriptions for the sort of data that should be gathered.**

Uncertainty in numbers: **These same two submissions went on to describe the role of population projections in making operational decisions and expressed concerns about an approach DOC appears to have taken but has not explained.**

Male/female ratios: **Three submissions provided detail about the importance of male/female ratios in operational decisions on control. They believed the bias produced by selectively controlling females had not been sufficiently considered in operational decisions.**

Population growth rates: **One submission argued that the decision on levels of control for the operational plan was based on unrealistically high population growth rates of tahr. They said that such rates could not be achieved by male-biased herds in less than ideal conditions.**

2.0 OVERVIEW

F&B (1)

10. Tahr numbers have got out of control because of a sustained failure to undertake the required control.

NZTF (8)

With the earlier consultation not indicating the large increase in magnitude of this year's plan, we presumed the Department was going to do more population monitoring and modelling before undertaking culling of this scale. The Department said they were going to look at [redacted]

modelling which gave us some hope they would take into account the population demographic and base future control work on a better understanding of the population and the longer term effects. The GAC has since done more significant modelling which we sincerely hope the Department is going to take into account in its revised 20/21 Operational Plan.

CACB (10)

To this end the Board would like to express its ongoing support of Department efforts to control the Himalayan tahr population and its adverse effects on the alpine environment, across the central South Island. The Board recognises that currently, tahr numbers are in excess of the targets set in the Himalayan Thar Control Plan (1993), and without active management to reduce these numbers, environmental degradation is inevitable.

LINZ (11)

LINZ acknowledges that tahr numbers are likely to be too high on some Crown pastoral leases and where this is the case, there will be a responsibility to undertake control. LINZ considers that management of tahr to sustainable levels can be consistent with leaseholders' ongoing ability to run commercial and recreational trophy hunting operations.

NZDA (12)

- *Respondent recreational hunters have indicated conservatively harvesting at least 4,092 tahr in the past 2 years, comprising:*

o at least 1,236 bulls in the past 2 years. o at least 2,856 non-bulls in the past 2 years. 3

NZDA notes that DOC should factor this reduction in its population and density analysis when determining Official Control intervention levels for the management units, including for 2020/21.

NZGE (13)

If we reduce the tahr herd below what constitutes a sustainable hunting resource without undertaking appropriate research and monitoring, it will take years to recover.

2.1 AT WHICH INTERVENTION IS REQUIRED

NZTF (8)

A lot of the TF members are farmers. I would suggest no farmer today is farming exactly the same as he was in 1993, to be successful and manage his assets he needs to constantly take in to account stocking rates and recovery of his pasture across different aspects and conditions. He needs to produce quality animals year after year to stay viable, and at the heart of that is maintaining a healthy landscape to support this. And he needs the social licence to continue farming, which requires taking into account environmental considerations.

A lower number of healthy animals within the carrying capacity of his land is key to his future today. It's not rocket science but science is needed. It is achievable but it takes commitment and constant reviewing.

2.2 POPULATION DATA

NZPHGA (4)

The NZPHGA strongly opposes the extent of the proposed 2020/2021 Operational Plan and the rushed manner in which it is being actioned without a robust assessment of the current state of the tahr herd or modelling and population projections on what the herd will look like after the proposed operations are complete.

GAC (5)

Identification of the need for and effects of Departmental tahr control requires knowledge of all or some of the following at the Management Unit level, and in some cases at finer scale (location, for short):

1. *The approximate density/number of tahr at that location now.*
2. *The approximate density/number of tahr (by demographic group) that Departmental control will remove from that location.*
3. *The density/number of tahr and herd demographics at that location after Departmental control.*

To summarise:

- *Any near real-time assessment of the current number of tahr in each MU is likely to be inaccurate and imprecise.*
- *The estimates for the tahr population in each MU for the period 2016-2019 are extremely imprecise (broad credible limits) and do not necessarily represent the populations at the end of the data collection period.*
- *There is incomplete information on additions and subtractions to each MU population during and since data collection for the Ramsey & Forsyth population estimates, making contemporary population projections difficult. However, sensitivity analysis can identify the importance of key assumptions in these models.*

2.3 UNCERTAINTY IN NUMBERS

MT Cook Trophy Hunting (3)

Plan we are supposed to be here today putting together today. Annoys me when we see MOC saying only 65 commercial tahr hunts done in the 2 national parks last year. Also said there will be thousands left after the border is open. Will not be there, because control is targeting the bulls. Nannies should be controlled. 17,000 last year 10,000 this year. Should not be any left. Where do we get the right numbers from? Expansion of tenure review plan has put a lot of land under DOC.

Trail of information is not correct. Ben and his team job to get the right information to Wellington. MOC only has information given by DOC. DOC returns not right – DOC's job. Knows one hunter that did 200 tahr last year. DOC's job to ensure returns are right. Critical of some of some our guys.

Numbers will never be right. Compromise required. [redacted] *stated case 2019 to 2021. No real numbers. Without this cannot make a real plan. First period of culling hours totally relevant. Needs numbers from that cull, needs to be readable.*

NZPHGA (4)

In the last 3 years we have collectively killed well over 18,000 tahr (Note 1). Right now none of us know quite what the tahr herd looks like with regard to population, densities and demographics.

There should be no rush to charge blindly ahead reducing the tahr population further without pausing to establish where the tahr population is at and modelling what the herd is likely to look like after any planned intervention.

Due to the 18,000 + tahr killed over the last 3 years plus those additional numbers killed in the National Parks in the initial 125 flying hours of the current operational plan we recommend that no further control work is carried out inside the feral range until a comprehensive monitoring program is undertaken to establish where the herd is at currently.

GAC (5)

The current (Ramsey & Forsyth) tahr density-estimation method is not appropriate for near real-time population estimation because it:

- *is extremely imprecise for the herd as a whole, but even more so at the management unit level (After 4 years of surveying (117 plots) the estimated population range divided by the mean for the various management units ranged from 1.1 to 2.46. For the first two years of data collection it ranged from 1.42 to 5.96)*
- *entails tahr counts from three, temporally-spaced, helicopter flights to each site*
- *depends on surveying a large number of sites*
- *entails long data-analysis delays*

This presents something of a problem. Residual population estimation must be either (i) "seat of the pants", based on live observation, which clearly has a number of issues, or (ii) based on some population projection that accounts for population additions and withdrawals and accounts for imprecision and uncertainties . Population projection can be formal (it is a widely applied branch of science with an abundant academic literature, including numerous ungulate applications), or it can be informal.

The Department appears to have adopted an extremely simplistic form of informal population projection to justify its planned operations. Clearly, members of the hunting community are doing likewise and reaching different conclusions. Lack of robust population projections questions the ability of the Department to act appropriately in real-time. Later in this submission the Council offers its own population projections, based on parameters drawn from peer-reviewed scientific literature.

2.4 MALE/FEMALE RATIOS

GAC (5)

Department (and other) claims for urgency of action to reduce the tahr population draw on three matters:

1. *An impending birth pulse*
2. *Exponential tahr population-growth rates of up to 28%*
3. *Threats to valued vegetation species (particularly Ranunculus Lyallii)*

Birth pulse: The number of breeding females in the herd drives the number of births. Recent control activities, which have targeted tahr not identifiable as males, have substantially reduced the number of breeding females.

NZTF (8)

Population demographic modelling is essential before we undertake much further culling as we approach the intervention densities in each MU, to ensure the best hunting resource is provided for that density of tahr. After last year's intensive nanny biased culling, we need to be very careful we don't cull nannies too heavily in some areas to the extent the densities are suppressed well below intervention levels and it jeopardises the longer term viability of the herd and seriously effects the viability of the hunting resource

SCI (9)

Official control may not be required for the HTCP targets to be realised through time due to ongoing reductions following female biased harvest that has yet to be realised

2.5 POPULATION GROWTH RATES

GAC (5)

Exponential growth:

The Department's claim of exponential tahr population-growth rates of up to 28% contributes to the

Department's informal population projection, supposedly offered as an indicator of the effects of each "birth pulse". Exponential growth does not go on forever and fauna populations more typically follow a sigmoid growth function for which the growth rate is highest at very low populations and declines to zero at carrying capacity. Dr Parkes has modelled population-dependent growth for tahr using such a sigmoid (logistic) function.

Scientific estimates of growth rates from various tahr populations fall in the range from zero to 28% in the absence of hunting. Some of those estimates include effects of immigration. Parkes (1988) used a "working figure" for the inherent growth-rate of 24%. However, in his logistic model growth at 24% applies only at extremely low densities when there are not many tahr to multiply, so the high growth rate is not a problem. It is impossible for a population to increase at anything near 24% if it is male dominated, as is now the case in the national parks, and increasingly elsewhere. The current tahr-population growth rate will be much less than 24%, particularly if the population is male-biased.

As well as additions (the birth pulse), population projections should account for all removals. While the Department considers recorded hunting mortality, two sources it excludes from consideration are unrecorded hunting mortality (recreational hunting) and natural mortality. Tahr do not live to an old age, the estimated natural annual mortality rate for tahr kids exceeds 50%, and for mature female tahr is about 20% (Caughley 1967, 1970). The mortality rate for mature males, which seldom reach eleven years of age, is somewhat higher again (Tustin pers. comm.).

3 CONTROL EFFORT

Overview: **Submissions commented on the need for control and level of effort required. One said they had been pressing for the level of effort shown in the 2020/2021 for many years and appended copies of letters to the Minister of Conservation to that effect.**

Needed to implement HTCP 1993: **Views differed on whether the Tahr Control Operational Plan 2020/2021 set an appropriate level of control effort given current circumstances. One said that control in recent years will have reduced numbers to levels where further control is not required. Another suggested the approach should focus on areas of high density and areas of high natural value.**

How control should be achieved: **Most comment was made on how control should be achieved and where effort should be focused. One said that *there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination. Because of: the demographic effects, the opportunity cost of culling bulls, the lack of an environmental imperative to immediately eliminate all tahr from the national parks, and the recreational and commercial benefits to the hunting community from them harvesting the remaining bulls.***

Of note is the comment that *about half of the proposed control hours in MU4 have been undertaken already. To allow hunters access to some tahr hunting in this MU, and for them to make a contribution to controlling bulls, the remainder of the control work in this unit should be postponed until June 2021. If bulls must be shot, and recreational hunters and guides are unable to do so in time, then it is most efficient to consider commercial uses of them, rather than shooting to waste. Where it prevents shooting to waste, the Council recommends consideration of commercial live capture, cape harvest, WARO or other uses from aerial harvest.*

Several submissions advocated focusing on nannies. One summed it up thus: *culling nannies not only reduces the herd size now (as does culling bulls), but it has two future effects that are different to bull culling:*

- ***longer suppression of the population because nanny tahr live much longer (bulls not shot are more likely to die of natural causes than are nannies)***
- ***a reduction in future recruitment (only nannies have kids and their productivity is essentially independent of bull numbers)***

The Tahr Control Operational Plan 2020/2021 had this focus outside of national parks. The operative decision would be whether to reinstate it for control inside the national parks.

Priority areas: **The Tahr Control Operational Plan 2020/2021 did not have this level of detail on priority areas. One submission suggested a *focus on national parks and getting numbers down as far as practicable and then focus on the two wilderness areas, the Hooker, Landsborough and the Adams.***

Another suggested as focus locations: *True left of the Copland round to Misty Peak , true left bottom of Horace Walker, Douglas/Clue to Lame Duck Flat, True left of Callery, Waikukupa and Omoeroa faces, Cook River.* In setting such detail, if it is done, regard should be had to comments in other sections on areas important for recreational hunters and WARO.

Timing of control: **Comment was also made about timing of control:** ***The Operational Plan was silent on when operations would take place. Late winter/spring are the times when there is least disruption to the hunting sector, and other backcountry users. Snow conditions at these times facilitate culling. Animal welfare considerations mean there should not be any control work from mid-November until the end of February. Delaying remaining control work in MU4 to June 2021 is desirable. Significant reductions in tahr numbers in MU4, particularly of males, will mean there is little incentive for hunters to be there at that time, mitigating the adverse effects anticipated if control work were undertaken at that time in other MUs. It would also provide the opportunity for hunting in the interim.***

Another submission elaborated: ***DOC culling should be done in July AUG Sep when most hunters have finished and before nannies have kids, do the culling in July away from where hunters will be, Wilderness Tahr Blocks should start first weekend of May and finish 2nd weekend of July,7.***

WARO and AATH: **Specific comment was made about WARO in several submissions such as:** ***the Department must make it easier for WARO operators to be able to operate, adding tahr (excluding identifiable bulls) to the existing WARO permit with spatial and temporal provisions to prevent conflict in April, May, June, is the necessary first step.***

5 *Put Tahr on normal WARO permit with conditions.*
6 *DOC culling to be done July AUG SEP, July away from where there will be hunters.*
7 *No culling, WARO or AATH within 1 KM of Huts or Known Campsites*
8 *Wilderness Blocks should be 1st weekend May to 2nd weekend of July*

Control of bulls: **Opinion in submissions was split regarding bulls being controlled in national parks. The arguments for controlling bulls were predominantly compliance with relevant law and policy. A secondary argument was that national parks have important indigenous biota vulnerable to tahr. The arguments against controlling bulls in national parks were:**

- **Bull tahr are highly valued by hunters.**
- **Bull tahr are a drawcard for hunters, leading them to control tahr and other exotic species.**
- **Bull tahr lead to additional support of the commercial hunting industry as international hunters will choose NZ (rather than other countries) to hunt red deer because of the concurrent opportunity to hunt tahr.**
- **Controlling bulls is unnecessary in controlling overall populations as their numbers are irrelevant to recruitment.**
- **With enhanced access recreational and commercial hunting could achieve management without official departmental control.**
- **There are no documented adverse effects on rare or threatened plants from tahr in the parks.**
- **Bull tahr have high natural mortality.**
- **If nannies are removed bull tahr will leave of their own accord to seek mates.**

Effort and setting targets: **Some submissions wanted operational plan targets expressed as numbers of tahr to be controlled, or the number of tahr to remain after control. These also wanted more specification at the management unit level. The arguments for these additions were that:**

- **The control plan refers to tahr numbers and so should the operational plan.**
- **It would assist hunters to know what was being sought in each place.**
- **Reasons could be given for the targets adopted, increasing understanding.**
- **Stopping points for control could be identified in each place.**
- **The intervention densities should be the stopping point for control.**

3.0 OVERVIEW

NZCA (6)

26. The populations of tahr on private and pastoral lease land is currently unknown. It will be critical to the ongoing control of tahr, for the Department to understand these population densities and trends.

29. The NZCA have delivered consistent advice to the Minister of Conservation on this matter, as can be seen in the attached public correspondence dated July 2018, April 2019, and July 2020. The NZCA has consistently highlighted the rising numbers of tahr and the expanding feral range as major concerns, and have advocated for many of the actions now stated in the TCOP 2020-21 to come into effect in previous Control Operational Plans.

30. The TCOP 2020-21 displays a tangible intent to fully understand the extent and impacts of tahr populations in New Zealand. There is a focus on striking the balance between ecological health, and achieving sustainable hunting practices.

SCI (9)

Principles:

- *Three decisions are needed:*
- *What is the desired goal?*
- *Which management option is therefore appropriate?*
- *By what action is this best achieved?*
- *It is not the function of the wildlife manager to make the necessary value judgments in determining the goal, any more than it is within the competence of a general to declare war.*

They should know whether current knowledge is sufficient to allow an immediate technical decision or whether research is needed first. The first decision requires a value judgement. The others are technical judgements. DOC should not decide the values. Should come in when it comes to deciding what is feasible and whether technical judgements can be made. Deciding what goal is appropriate.

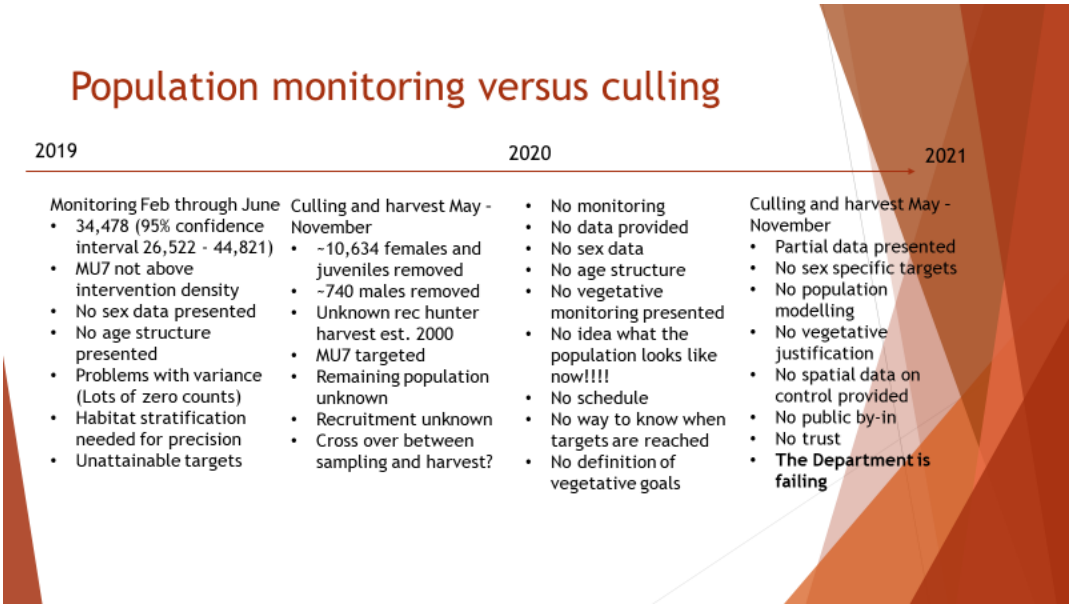
Wild game management 101

- *For complex problems it helps to be more formal and organized, mapping out on paper the path to the decision through the facts, influences, and values that shape it.*
- *This process should be explicit and systematic.*
- *It helps also to determine which disagreements are arguments about facts and which are arguments about judgments of value.*
- *Before we begin manipulating a wildlife population and its environment, we must ask ourselves why we are doing so and what is it supposed to achieve.*
- *Where do we want to go?*
- *Can we get there?*
- *Will we know when we have arrived?*

- *How do we get there?*
- *What disadvantages or penalties accrue?*
- *What benefits are gained?*
- *Will the benefits exceed the penalties?*
- *Will we know when we have arrived – means recognising a stopping point*
- *Policies are usually composed in broad terms that provide no more than a general guide for the manager.*
- *Non-policy -"protecting intrinsic natural values."*
- *Non feasible policy*

  - two or more technical objectives are mutually incompatible. Or
  -so specific that it actually determines technical objectives and sometimes even management actions that may be unattainable

- *Objectives must be attainable within a specified time frame and defined in a technical schedule.*
- *There must be an easy way of recognizing failure to attain an objective.*



2019 – management unit 7 not above intervention densities – unattainable targets (zero density)

– remaining population unknown – recruitment not known cross over between counting and harvest

2020 no monitoring - Culling begins - No public buy-in and no trust - Anger – extreme risk to conservation

2021 - Not culling in management unit 4 will not cause catastrophe - Not a threat.

HTCP

- *Sustainable harvest*
- *Tahr - a natural resource*
- *Reduces costs of animal management to general public*
- *Provides income to support conservation initiatives and conservation science*
- *Socially acceptable*
- *Adaptive management*

- *Allows for change*

Is the Department the right agency to implement the entire HTCP?

Sustainable harvest. Adaptive management. HCTP remarkable for its time. Experimental – vegetative based.

Current Minister of Conservation – hunters have failed to keep numbers in check – did not know that was our job. [redacted] *has never kept game herds in check – neither has DOC.*

Far behind the rest of the world. Industry and vegetation both at risk. DOC not trying to achieve eradication – sustained over time - sustainable harvest model. Work constructively to secure the future. DOC set vegetative goals. GAC manage hunters and sustained harvest. Hunting sectors coordinate. Minister oversees both DOC and GAC. Valued restored and maintained by all.

A progressive approach. SCI advises….

- *Intensive culling effort committed outside the feral range as is control priority.*
- *No further culling inside the feral range until the following is conducted or presented*
- *Population abundance 2020 / 2021*
- *Sex data and age structure by MU*
- *Population modelling to support ongoing sustainable harvest model*
- *Measurable vegetation goals clearly defined*
- *Clearly define how we will know goals have been achieved*
- *DOC move to function as support and regulatory agency in co-governance with Nga Tahu.*
- *Hunter and animal management implemented by a Sustainable harvest management team under GAC direction to regain public buy in and ensure conservation is not negatively impacted by the publics lack of trust.*

LINZ (11)

Thank you for the opportunity to comment on the Tahr Control Operational Plan 2020/21. We support the Department's objective to manage tahr numbers to sustainable levels on public conservation land.

3.1 NEEDED TO IMPLEMENT HIMALAYAN THAR CONTROL PLAN (HTCP) 1993

F&B (1)

2. As a preliminary comment, we support the Department in ramping up its control efforts and ceasing the practice of not targeting bull tahr in national parks. We see these as positive steps.

3. We are also generally supportive of the operational plan. Our main comments relate to the:

a. use of helicopter hours as the measure of effort.

b. absence of a plan to achieve the control plan numbers.

11. DOC has constantly indicated that it needs time to undertake the control work that is necessary to achieve the control plan numbers. However, despite resuming control efforts more than two years ago, no detail has been provided about how and when the control plan will be achieved.

Mt Cook Trophy Hunting (3)

Un-thought-out plan. Throwing hours at heli hunting. Plan in the easy country. Instead of concentrating on the exclusion zones and managing nannies in high density areas leaving bulls to recreational and commercial.

NZCA (6)

10. The Department's Annual Tahr Control Operational Plans seek to achieve the targets set in the Himalayan Tahr Control Plan 1993 (HTCP), prepared under section 5(1)(d) of the Wild Animal Control Act 1977. These annual control plans are devised after advice from Ngāi Tahu, the hunting sector, and the Tahr Plan Implementation Liaison Group, and so reflect the efforts of the HTCP to achieve a balance between human activity and the health of the environment. A balance that can be achieved when the tahr population is at 10,000 across the feral range.

11. The NZCA supports the priorities listed in the Tahr Control Operational Plan (TCOP) 2020-21 and offers comment below.

22. The NZCA supports the priority to bring populations towards levels in the HTCP by focusing on localised areas of high density of tahr and on areas where tahr have mobbed up, thus protecting natural values at place.

NZTF (8)

Targeted culling of higher density areas and higher conservation value areas in the MUs is what is required to meet the directive and objectives of the '93 HTCP.

SCI (9)

Inside the feral range, but outside the two National Parks, there is absolutely no urgency or justifiable need to undertake the hours of control proposed. It is clear that there is a lack of evidence to indicate urgency of control on the basis that;

- *No species are confirmed to be threatened or at risk of extinction from the current densities of tahr*
- *There are no updated scientific measurements to indicate densities exceed thresholds*
- *The large number of tahr removed over the past two years has resulted in a considerable population reduction*
- *Official control may not be required for the HTCP targets to be realised through time due to ongoing reductions following female biased harvest that has yet to be realised*

NZDA (12)

NZDA would like to see DOC avoid a situation when DOC's Official Control culls tahr to a level too low that it causes conflict among hunters and between recreational hunters and the commercial tahr hunting sector. Over commercial harvest of tahr was the genesis for the 1993 Plan and Policy.

3.2 HOW CONTROL SHOULD BE ACHIEVED

Mt Cook Trophy Hunting (3)

If we are here to create a plan. Here it is. Create the management blocks in the feral range. Pick out 4 best contractors. Put one in charge of each of these areas. Overseen by DOC. If he does not do his

job he is replaced. Worked on red deer in Fiordland. All we had was helicopter wars. Making deer wild and pushing them into the bush. This what we have now for tahr. Un-orchestrated plan – shoot the shit out of them – shoot the bulls. Need a concerted plan. Sure they got 900 from first hours, then they will get 600, then 300 – pushed them into the bush, night dwellers. Do more damage in the bush than on the top. If we had 9,000 tahr 2,000 born each year – 50% male and female. Harvest 2,000 each year – would get about 2,000 bulls at 8 years of age each year maintain a herd of about 7,000 ongoing with culling. When plan made few commercial operators taking a few tahr, 200 total. Now one operator taking 200.

NZPHGA (4)

We've seen comments from the Department and Forest and Bird stating that the hunters haven't controlled the tahr. While in fact, hunters ability to do so and to be recognised as doing so lies with DoC. Recreational hunter tahr kills have not been recognised by the department. These numbers are considerable. Hunter helicopter transport access to National Parks and Wilderness Areas continues to be extremely limited. The answer to increased hunter control of tahr numbers is increased landing access to these remote areas. Hunters need a lot of gear - heavy optics, rifles, cape salt, etc. They also have a lot of additional weight to carry out - meat, skins and capes, horns. They are not going to routinely walk considerable distances in rugged terrain carrying all of this plus camp and personal equipment into their campsite. Increased helicopter landing access in national parks and wilderness areas is the answer to enable hunters, both commercial and recreational to kill more tahr. We understand that this needs to be managed around other Park and Wilderness Area users requirements of peace and quiet. Hunters don't need unfettered helicopter access to these areas, but a managed, limited system that works for all users is achievable. Perhaps on a seasonal basis for example - limited landing access over and above the Ballot system access during Autumn and Winter, leaving the trampers in quiet peace during the Summer.

We recommend that the remainder of the current operational plan control effort should be focused on tahr populations outside of the feral range and in the exclusion zones. Limiting spread outside of the feral range should be the highest priority. 'A stitch in time saves nine'. The judas program outside of the feral range should be utilised to its full potential.

GAC (5)

In its consideration of the implications of the Operational Plan, key items considered by the Game Animal Council, informed by consultation with the hunting sector, included:

- *Where tahr density should be reduced*
- *The quantum of tahr density reduction*
- *The appropriate timing of tahr density reduction activities*
- *Who should control tahr*
- *Which animals to target*

The Game Animal Council has considered three main evaluative criteria:

- *The effects of tahr control on the natural environment*
- *The effects of tahr control on the hunting sector*
- *The effects of tahr control on future control requirements*

Operational Plan objectives

The HTCP specifies intervention densities for tahr in each of the management units. The Operational Plan proposes tahr density control only on public conservation land (PCL). Consequently, the Council's

advice addresses the specific density in each management unit. The Council has established target tahr populations consistent with those densities and Manaaki Whenua estimates of the areas of PCL in each management unit.

Longer-term implications

Herd demographics determine future recruitment. Tahr are highly polygynous, so few males are required to service the females. Consequently, reductions in male tahr numbers have little, if any, effect on the number of births. Few female tahr breed until they are three years old, but each female will have several offspring during her life. Her female offspring will have several offspring. Furthermore, nannies have a significantly lower natural mortality rate than bulls.

To illustrate the importance of demographics, consider two absurdly extreme cases (i) a herd containing 100 adult females and 1 adult male, and a herd containing 1 adult female and 100 adult males. Assuming 100% breeding success the numbers of animals added to each herd in the birth pulse will be:

(i) 100 births
(ii) 1 birth

Clearly (abstracting from deaths, which will be lower in herd (i)), herd (i) will have an extremely high growth rate, whereas herd (ii) will be unable to sustain itself. Managing herd demographics can have a substantial effect and can contribute to long term population effects. Populations can continue to shrink after termination of control when control targets females. The corollary is that selectively targeting females and achieving target densities now will result in future populations significantly below target densities. In other words, there is no need for immediate target-density attainment if females are targeted and doing so sufficiently skews the sex ratio.

Culling nannies not only reduces the herd size now (as does culling bulls), but it has two future effects that are different to bull culling:

- *longer suppression of the population because nanny tahr live much longer (bulls not shot are more likely to die of natural causes than are nannies)*
- *a reduction in future recruitment (only nannies have kids and their productivity is essentially independent of bull numbers)*

In other words, shooting a bull or a nanny is irrelevant if all that matters is how many tahr exist at the conclusion of this year's cull. That is extremely myopic thinking. Shooting a bull or a nanny has a highly significant differential effect on both the number of tahr existing in subsequent years, and herd demographics. Shooting a nanny reduces the future population by much more than one. A bull-biased population is better for hunters, reduces future population size, and reduces requirements for future control work

- *There is no imperative for urgent population reductions.*
- *Controlling nanny tahr is the key to long-term population management and environmental effects.*

The Council's conclusion is that the currently proposed scale of tahr control has the potential to overshoot the limits specified in the HTCP in some management units. These uncertain situations are where adaptive management is of particular benefit, suggesting a "go quietly, monitor, and adapt" approach, consistent with the department's principles. Control effort should focus on female tahr, but should recognise the effects on future recruitment and not go too far.

Consequently, there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination. Because of:

- *the demographic effects,*
- *the opportunity cost of culling bulls,*
- *the lack of an environmental imperative to immediately eliminate all tahr from the national parks, and*
- *the recreational and commercial benefits to the hunting community from them harvesting the remaining bulls.*

Where it prevents shooting to waste, the Council recommends consideration of commercial live capture, cape harvest, WARO or other uses from aerial harvest.

Tahr outside the feral range and in exclusion zones: *The HTCP wisely gives top priority to controlling tahr in these areas. Large and small tahr populations remain outside the feral range. They are a significant potential threat to treasured environments (such as Fiordland National Park). Range expansion and increases in tahr populations outside the feral range will result in significant future control costs for the Department. Benjamin Franklin's adage that an ounce of prevention is worth a pound of cure applies well in this situation. Containing and shrinking the perimeter is vital.*

Based on the central R&F population estimates, the biggest "surplus densities" are in MUs 2 and 3, where the bulk of culling should occur. Indeed, under all density/population estimate scenarios, the biggest reductions should occur in MU2 and MU3, with about 50% more harvest in MU3 than in MU2.

Timing

The Operational Plan was silent on when operations would take place. Late winter/spring are the times when there is least disruption to the hunting sector, and other backcountry users. Snow conditions at these times facilitate culling.

Animal welfare considerations mean there should not be any control work from mid-November until the end of February.

Delaying remaining control work in MU4 to June 2021 is desirable. Significant reductions in tahr numbers in MU4, particularly of males, will mean there is little incentive for hunters to be there at that time, mitigating the adverse effects anticipated if control work were undertaken at that time in other MUs. It would also provide the opportunity for hunting in the interim.

NZCA (6)

20. The NZCA supports the priority to maximise efficacy of population reduction through recreational hunting, guided hunting, and commercial recovery.

21. It will be important for the Department to work with the hunting sector on public conservation land, private land, and pastoral lease land in order to fully realise the current population levels and to reach those specified in the HTCP. There may be opportunity to offer employment opportunities to those hunters affected negatively by Covid-19.

The NZCA submits that: the Department explore potential employment opportunity through the Jobs for Nature initiative in order to utilise professional and commercial hunters who have been negatively affected by the Covid-19 pandemic, to achieve tahr population levels as specified in the HTCP.

NZTF (8)

We would have agreed to continue nanny culls in population and ecological hotspots especially in WNP, but we are extremely disappointed to see the Department has instructed or allowed such heavy culling in the most hunted valley in the NPs – the Murchison valley including around Liebig and Steffan huts. Both [redacted] *helicopters have done runs in exactly the same places*

about a week apart, which shows either the Department is really trying to stick it to recreational hunters, or a complete lack of management by the Department of its contractors. We hope it is the latter, but this is still not a good look, when there is much more inaccessible areas of the Park they should have instructed their contractors to target.

Population demographic modelling is essential before we undertake much further culling as we approach the intervention densities in each MU, to ensure the best hunting resource is provided for that density of tahr. After last year's intensive nanny biased culling, we need to be very careful we don't cull nannies too heavily in some areas to the extent the densities are suppressed well below intervention levels and it jeopardises the longer term viability of the herd and seriously effects the viability of the hunting resource. Any culling in most of the MUs this year must be precautionary until this monitoring and population modelling is done. And this needs to be done at MU density level as stipulated in the Plan, not whole of population. It is essential we work together to provide the best hunting resource possible within the intervention densities set in the Plan. Just throwing hours at control will certainly not do this.

We have provided information on what areas and MUs require more extensive nanny culling in the interim until this population modelling has been completed. Our members have more up to date information on these areas than the department in a lot of cases. (The information we have provided is included in the GAC's proposal.)

Again, if we get this wrong, we will cause hunters to boycott those areas jeopardising the cheapest form of herd control.

If after we agree on the 20/21 Control plan, the agreed control work is not able to be completed before kid drop this year, we would accept the remaining work could be done in the remote areas that are harder for the hunters to access in June 2021, giving the hunters the popular spring and summer and early rut period to make the most of the tahr resource.

In the absence of this information required of the Department by the 93 plan, and as a show of good faith, we agreed to the huge nanny biased culls of last year. Going forward we expected a phased approach, based on sound science. Unfortunately this is certainly not what we see in the draft 20/21 operational plan, and as a consequence of the department's management of this process, is why we are now in the middle of tarhmageddon 2!

SCI (9)

SCI would also like the Department to maximise hunting opportunities for hunting sector. In the near future there will not be a great deal of work for helicopter operators in places like Franz Josef Glacier and Fox Glacier. Enabling these operators to drop recreational hunters and guided parties into remote areas of Westland National Park would be a great initiative for regional spending and is the preferable method to reduce bull tahr numbers in the National Park. Conservation projects, such as running and servicing stoat lines to protect whio could be a condition of the permit to land.

Sustainable adaptive management is the only way to avoid boom bust cycles caused by Wild Animal Control.

CACB (10)

The operative Aoraki Mount Cook National Park Management Plan is clear about exterminating or controlling introduced fauna in, and adjacent to, the National Park, and is specific about tahr: policy 4.1.5(b) is "to exterminate tahr within, and actively control tahr adjoining the Park." (page 57). 2a

The Canterbury (Waitaha) Conservation Management Strategy natural heritage policy 1.5.1.16 is also clear: "Contain Himalayan tahr within the feral range set out in the Himalayan Tahr Control Plan

1993 and seek to ensure that new populations of wild animals and pest animals are not established." (page 32).

The Canterbury Aoraki Conservation Board's advice to the Director-General of Conservation is to actively implement these policies.

NZDA (12)

- *Tahr hunting is done year round, with slightly less emphasis on summer hunting.*
- *Tahr hunting is mostly done during holidays – long-weekends, public holidays and when taking annual leave from work. This helps DOC decide when to do Official Control to avoid conflict with hunters and ruining their holiday trips.*

NZDA notes its key stakeholder role in maintaining huts, tracks and working on other volunteering projects in partnership with DOC both in the tahr range and nation-wide.

NZDA carries out this volunteer work in areas of importance to hunting access for its local members. NZDA undertakes alpine hunter training using the huts as their base (i.e. for HUNTS courses) in the tahr range. DOC should seek to encourage NZDA training more tahr hunters and recognise the value of having a motivated and skilling recreational hunting community.

Public land areas are where NZDA members and the majority of recreational hunters hunt tahr. This means DOC must reflect the importance of a reasonable hunt-able tahr herd for recreational hunters' fulfilment in DOC's operational plans.

NZDA presented at the verbal meeting regarding huts, noting where DOC should avoid Official Control to ensure those areas have reasonable tahr for hunting and to reduce conflict with general public and hunters.

In summary, NZDA submits:

- *DOC should not carry out Official Control within 3kms of huts, tracks, and landing sites/camps, especially in the East Coast management units and on the West Coast hunter landing sites (Christmas Flat, Horace Walker and Lame Duck huts).*
- *DOC should expressly not undertake Official Control around NZDA managed huts – NZDA members can do hunter lead control in these areas. DOC should carry out density studies and communicate to NZDA branches how many tahr should be culled in the relevant area. This will require communication and ascertaining target densities. DOC should encourage NZDA's active participation in hunting tahr sustainably and continuing to maintain backcountry huts.*

NZDA submits Official Control should only occur:

- *During late-July, after the end of the tahr ballot period, August, September and October.*
- *Not during long weekends and key holiday periods – i.e. align to when hunting cannot occur in the Fox Glacier Valley and Copland Valley, for example. DOC understands the importance of these times to people use public land and should apply this to tahr hunters.*

The above timings should apply to all WARO, AAHT and Official Control concessions/permits. It will mean DOC will cause less direct conflict with recreational hunters.

NZDA submits for the 2020/21 (and all future Operational Plans) that DOC uses the full available 12-week period permitted for landing permits in wilderness areas (known as the tahr ballot). Page 33 of the 1993 Plan contemplates DOC issuing "landing permits [sic] to operators who wish to land [sic] for up to an annual twelve-week period to run from April till July". Currently the ballot period is only 8-9

weeks, however NZDA strongly suggests DOC extends the tahr ballot periods to allow for additional recreational tahr hunter control:

- *Last week of April – one week*
- *May – 4 weeks*
- *June – 5 weeks*
- *July – 2 weeks*

NZDA submits for the 2020/21 operational period that the plan should be to focus on the exclusion zones (north and south) and tahr known to be outside the feral range, with a particular focus on the south (because of the National Parks located there).

All Official Control should be by heli-operators.

No ground hunters should be used for safety, efficiency and to minimise conflict with recreational hunters (they will come into contact).

3.3 WARO AND AATH

[redacted] **(7)**

WARO Operators would like to have Tahr put on the standard WARO permit so when out hunting and they come across Tahr they can shoot them, there needs to be times of the year when no Culling, no WARO and no AATH is allowed and this should be May June July when Bulls are rutting and many hunters in the hills, plenty of private land this could happen on in these months, No WARO or AATH or culling within 1 KM of Huts or known campsites, any non standard operation in the Parks needs to advised to the user groups as per User Group requirements, DOC culling should be done in July AUG Sep when most hunters have finished and before nannies have kids, do the culling in July away from where hunters will be, Wilderness Tahr Blocks should start first weekend of May and finish 2nd weekend of July,7

1. *Put Tahr on normal WARO permit with conditions.*
2. *DOC culling to be done July AUG SEP, July away from where there will be hunters.*
3. *No culling, WARO or AATH within 1 KM of Huts or Known Campsites*
4. *Wilderness Blocks should be 1st weekend May to 2nd weekend of July*

Target nannies and kids not Bulls as this is what hunters are after.

SCI (9)

SCI agrees with other stakeholders that the Department must make it easier for WARO operators to be able to operate, adding tahr (excluding identifiable bulls) to the existing WARO permit with spatial and temporal provisions to prevent conflict in April, May, June, is the necessary first step. The Departments failure to make this process easier has not helped with controlling tahr populations to date. SCI also recognises that a subsidy for these operators is a good idea and one that should be fully explored.

3.4 CONTROL OF BULL TAHR

F&B (1)

2. As a preliminary comment, we support the Department in ramping up its control efforts and ceasing the practice of not targeting bull tahr in national parks. We see these as positive steps.

GAC (5)

It is obvious that tahr numbers in MU4 currently exceed those specified in the HTCP. However, significant tahr control in 2018 and 2019 (4,000 tahr not recognisable as bulls from an estimate of 7,666 tahr in 2016-2018) has had a major effect on population, herd demographics and reproductive capacity.

The Council sought to discuss the impacts of herd demographics and illustrated the importance of doing so in earlier engagement, an offer not taken up by the Department. The initial information provided by the GAC appears in Annex 2 of the material supplied for the current meeting. The information the Council supplied anticipated a significantly smaller amount of Departmental control than proposed in the Operational Plan, and focussed on the issue of killing bulls, so these projections offer limited information on outcomes if the current plan proceeds.

The HTCP enables the Department to kill bulls in the national parks, confirmed by the recent court ruling. However, the important question is not whether it is legal to kill bulls in the park, but whether it is desirable to do so. It is the Council's opinion that killing bulls would prolong the time taken to achieve the purposes of the HTCP. It would also create adverse effects for the hunting sector.

The Council reaffirms that shooting bulls has no effect on reproduction, which is the driver both of future environmental effects and the quantum of control required in the future. Leaving them, even temporarily, may avoid or reduce the need for future Department control of bulls.

Shooting bulls now has adverse effects for commercial and recreational hunters. Bulls are of high commercial value, which will be important for COVID recovery. The historic harvest of bulls from the parks is not a guide to annual bull harvest once the border opens because nearly all bookings have been carried forward, effectively doubling harvest upon re-opening. Attaining a bull tahr trophy in the stunning national park environment is an aspiration for many recreational hunters. In short, the bulls have high value to the hunting sector, but have little importance for future environmental effects. If time spent culling bulls reduces the number of nannies culled, there is a significant opportunity cost to the environment from culling bulls.

The strategy that hastens achievement of HTCP objectives in national parks is to cull as many nannies as possible.

The Council notes the lack of scientific evidence to support the need for immediate culling of all tahr in the national parks. However, it notes a number of unsubstantiated claims in the media. An example is a claim that eliminating tahr in the national parks is necessary to protect the Aciphylla weevil. Since that extremely rare weevil is not found in either park, culling tahr in the parks will not have any effect on the weevil. Further, claims that tahr threaten Ranunculus and Veronica species in the parks are not substantiated by either the official threat status, or by scientific research. Consequently, there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination. Because of:

- *the demographic effects,*
- *the opportunity cost of culling bulls,*
- *the lack of an environmental imperative to immediately eliminate all tahr from the national parks, and*
- *the recreational and commercial benefits to the hunting community from them harvesting the remaining bulls*

The Game Animal Council's advice to the Department is to avoid culling bulls in the national parks, and certainly to avoid "going out of the way" to do so.

NZTF (8)

After last year's large nanny culls in the NPs, there has been no environmental need demonstrated by anyone to target bulls. The targeting of bulls is also the least efficient way of lowering the population in NPs, as clearly demonstrated by the GAC. With low nanny numbers, the bulls will leave to find mates outside the NPs, and those that stay will be progressively shot by hunters - if they are left there to attract hunters into the NPs. They also have very high natural mortality (Tustin pers. comm.) There will also be very low recruitment, and the bulls will not be replaced by natural increase to any extent.

SCI (9)

With this in mind we come to the contentious issue at hand, "bulls in the Parks". Until such a time as we have the vegetative information to know what density of tahr have negligible impact on a site-specific basis, we will support lowest possible maintainable densities.

"Official control will generally only be employed when other alternatives have not proved to be either successful or viable. The exemptions to this are in the Northern and Southern exclusion zones and the Wills/Makarora/Hunter and possibly Mount Cook / Westland National Parks management units, where recreational, guided or commercial hunting are unlikely to achieve population targets over the entire area." We are therefore pleased that the NZCA have extended the offer of considering a plan from the GAC, which demonstrates a likely achievement of target densities over the entire area by the hunting sector. SCI advises the Department to suspend official control of bulls in the two National Parks and facilitate a more agreeable plan in collaboration with the GAC. Again, we highlight the lack of urgency for culling and the page 41 provision above legally allowing for this more reasonable solution to be found.

NZDA (12)

Submission: Bull tahr should not be expressly targeted in Official Control, including in National Parks. The 1993 Plan does not specify the sex of tahr that should or should not be culled by Official Control and so DOC has flexibility in that regard – the overriding imperative is tahr density. The bulls are the draw card for recreational hunters. Removing bulls will mean incidental hunting will not occur which is done when hunters are in areas populated by tahr – i.e. nannies/juveniles, deer and chamois are all harvested by hunters when seeking out bull tahr. Targeted nanny-control by DOC when undertaking Official Control will have a better outcome on tahr herd management and is also a more cost efficient population control method. If tahr numbers are too low, or perceived by recreational hunters to be too low, then those areas will be avoided by hunters. This will have a net negative environmental outcome and should be avoided by DOC.

3.5 PRIORITY AREAS

F&B (1)

Focus on national parks and getting numbers down as far as practicable and then focus on the two wilderness areas, the Hooker, Landsborough and the Adams.

GAC (5)

It is important to recognise that the target-density approach to allocation of culling effort does not take account of other criteria. The Council proposes the following hierarchy, consistent with the HTCP, to consider when deciding where to target tahr control. In order from highest importance these are:

1. *places of particular environmental concern (which may not have particularly high tahr numbers, but where the environment is particularly susceptible to tahr)*

2. *tahr population hotspots*
3. *places where it is difficult for the hunting sector to harvest tahr and*
4. *overall management unit density.*

The Operational Plan does not address any of these matters, although they may have played an important role in decision-making and simply not communicated. The Game Animal Council recommends these matters should be considered in finalising the Operational Plan, and they should be clearly communicated in future draft plans.

Consequently, there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination. Because of:

- *the demographic effects,*
- *the opportunity cost of culling bulls,*
- *the lack of an environmental imperative to immediately eliminate all tahr from the national parks, and*
- *the recreational and commercial benefits to the hunting community from them harvesting the remaining bulls.*

Suggested focus locations

1. *True left of the Copland round to Misty Peak*
2. *True left bottom of Horace Walker*
3. *Douglas/Clue to Lame Duck Flat*
4. *True left of Callery*
5. *Waikukupa and Omoeroa faces*
6. *Cook River*

About half of the proposed control hours in MU4 have been undertaken already. To allow hunters access to some tahr hunting in this MU, and for them to make a contribution to controlling bulls, the remainder of the control work in this unit should be postponed until June 2021. If bulls must be shot, and recreational hunters and guides are unable to do so in time, then it is most efficient to consider commercial uses of them, rather than shooting to waste.

3.6 EFFORT AND SETTING TARGETS

F&B (1)

USE OF HOURS AS THE MEASURE OF EFFORT

4. *We remain troubled by the use of helicopter hours as the sole measure of effort. While we understand the difficulty that flows from the absence of accurate tahr numbers, we think the plan goes too far in relying solely on hours of control as the measure of effort.*

5. *Our view is that the control plan refers to tahr numbers and so should the operational plan.*

6. *The importance of numbers was evident in the recent High Court case taken by the Tahr Foundation. Despite the 2019/2020 plan referring to hours of control as the measure of effort, the parties were constantly referring to the numbers that would be controlled, and used a rule of thumb of 30 tahr per hour of control.*

7. *The use of such a rule of thumb is undesirable as the actual numbers controlled will vary across the feral range and the use of rule of thumb is likely to result in inaccuracies.*

8. *In order to address this concern, we seek that the hours of control be supplemented with a target number of tahr to be controlled in the assigned hours of control. This would provide*

greater transparency and give an idea, even if just estimated, about how the control is achieving the intervention densities. We understand that DOC has made or could make such estimate that could be included in the plan.

However, there are a couple of issues that need to be addressed before we can fully support it, in particular:

a. the addition of a targeted number of tahr to be controlled in each management unit;

GAC (5)

DOC aerial tahr control

While the Operational Plan clearly identifies the quantum of DOC control activity (specified as hours of flying time), and the various groups who contribute to tahr control on PCL in each MU, there are several important omissions:

- *Justification for the number of hours of DOC aerial control in each MU*
- *PCL tahr population targets for each MU*
- *Identification of, and reasons for, priority control locations within each MU*
- *Timing of DOC control operations*

Stopping point

Should Departmental control occur, a "stopping point" for control is required for each management unit – essentially the intervention density. Effective implementation depends on availability of a near realtime measure of the remaining tahr density in each management unit. Stopping point identification was not a matter considered by the Game Animal Council in previous engagement because the Council's (erroneously) envisaged scale of operations for the 2020/21 year were at a level that did not trigger the need for a stopping point, whereas the scale of currently proposed operations does.

The current (Ramsey & Forsyth) tahr density-estimation method is not appropriate for near real-time population estimation because it:

- *is extremely imprecise for the herd as a whole, but even more so at the management unit level (After 4 years of surveying (117 plots) the estimated population range divided by the mean for the various management units ranged from 1.1 to 2.46. For the first two years of data collection it ranged from 1.42 to 5.96)*
- *entails tahr counts from three, temporally-spaced, helicopter flights to each site*
- *depends on surveying a large number of sites*
- *entails long data-analysis delays*

4 CONTROL IN NATIONAL PARKS

Overview: **Submitters were divided as to whether it was desirable to pursue control of tahr to zero density in national parks.**

Arguments for doing so were:

- **National parks provide a safe haven for New Zealand's native species.**
- **It is required by the National Parks Act, policy, and management plans.**

- **Tahr numbers are in excess of the targets set in the Himalayan Thar Control Plan 1993.**
- **It will provide opportunity for Aotearoa's biodiversity to thrive, ensuring the enjoyment of the National Parks and the Southern Alps for generations to come.**

Arguments against were:

- **It creates unnecessarily different approaches for different classes of Public Conservation Land.**
- **There does not appear to be any environmental imperative to immediately remove all tahr from the national parks because of:**
  - **Demographic effects.**
  - **The opportunity cost of culling bulls.**
  - **The recreational and commercial benefits to the hunting community from their harvesting the remaining bulls.**
  - **The loss of benefits of free control from recreational hunters who will no longer hunt in national parks if they have little/no chance of a successful trophy hunt.**
  - **Reducing opportunities for recreational hunters in the national parks would increase recreational hunting pressure in other MUs and lead to resurgence in conflict between the recreational and commercial hunting sectors.**

One submission said that control in national parks should exclude hunter landing site areas and areas around all huts and tracks (3km buffer).

[redacted] (2)

5. Much of the statutory and policy framework directing tahr control for environmental purposes is no longer aligned with the total cross section of public interests. There exists an apparent disparity between different classes of Public Conservation Land (PCL) which creates unnecessary conflict. [redacted] *supports the implementation of the Tahr Control Operational Plan 2020/21 when combined with successive control operations except for moving towards achieving zero density within National Parks. Prior to the commencement of 2021/22 control operations* [redacted] *would move that DOC should update the Plan to reflect modern expectations and provide consistency across the statutory and policy framework.* [redacted] *understand the inherent difficulties with addressing such documents but sincerely hope that common sense could prevail…*

GAC (5)

The strategy that hastens achievement of HTCP objectives in national parks is to cull as many nannies as possible.

The Council notes the lack of scientific evidence to support the need for immediate culling of all tahr in the national parks. However, it notes a number of unsubstantiated claims in the media. An example is a claim that eliminating tahr in the national parks is necessary to protect the Aciphylla weevil. Since that extremely rare weevil is not found in either park, culling tahr in the parks will not have any effect on the weevil. Further, claims that tahr threaten Ranunculus and Veronica species in the parks are not substantiated by either the official threat status, or by scientific research. Consequently, there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination. Because of:

- *the demographic effects,*
- *the opportunity cost of culling bulls,*
- *the lack of an environmental imperative to immediately eliminate all tahr from the national parks, and*
- *the recreational and commercial benefits to the hunting community from them harvesting the remaining bulls*

NZCA (6)

12. The NZCA strongly supports the 2020-21 priority to take the Aoraki/Mount Cook and Westland Tai Poutini National Parks towards zero density.

13. National Parks provide a safe haven for Aotearoa's native species, and the Department of Conservation has not only a moral, but a legal obligation to ensure that this protection is robust.

14. The extermination of tahr in the National Parks is consistent with the National Parks Act 1980, the General Policy for National Parks, and the Management Plans of both the Aoraki/Mount Cook National Park and the Westland Tai Poutini National Park.

17. Previously, the Department have compromised the intrinsic value of our National Parks for the appeasement of the hunting sector; so the NZCA is pleased to see that the proposals within this plan realign the Department's legal and moral obligations to the Aoraki/Mount Cook and Westland Tai Poutini National Parks.

24. Controlling tahr numbers in National Parks to the lowest practical densities, as far as possible, and to a maximum of 10,000 across the feral range, as stipulated in the HTCP, will provide opportunity for Aotearoa's biodiversity to thrive, ensuring the enjoyment of the National Parks, and the Southern Alps for generations to come.

31. The NZCA give their full support to the policy of total control of all tahr within the National Parks, and continued efforts to achieve a tahr population level and feral distribution in accordance with the HTCP.

NZTF (8)

Targeting eradication in NPs is not the best use of the Department's budgets, and is not necessary to protect vulnerable alpine ecosystems. Culling to a low population that still provides for a viable hunting resource is the best solution because it will still encourage hunters to go in there doing a significant amount of control at no cost to the tax payer. Controlling to zero density means no hunters will bother to go in the NPs, removing the largest users of the NPs away from the tourist walks, and ensuring the Department will have to do all control in the future.5

The hunting sector have asked for bull tahr to be given an exemption from the eradication clause for the next year anyway as the NZCA is able to do under Section 4 2 b, but we've been turned down without what we feel is proper consideration. There are precedents for exempting valued introduced species from total eradication, and we feel tahr are certainly one of these. The Department will never achieve total eradication anyway, and far better to cull to a low level that protects the alpine environment but leaves a viable hunting resource. This is just common sense.

CACB (10)

To this end the Board would like to express its ongoing support of Department efforts to control the Himalayan tahr population and its adverse effects on the alpine environment, across the central South Island. The Board recognises that currently, tahr numbers are in excess of the targets set in the Himalayan Thar Control Plan (1993), and without active management to reduce these numbers, environmental degradation is inevitable. Therefore, we strongly support the Tahr Control Operational Plan 2020/21, including efforts to reduce tahr populations to as close to zero density as practicable in the Aoraki Mount Cook National Park and the Westland Tai Poutini National Park.

5 CONTROL OUTSIDE OF NATIONAL PARKS

Overview: **Submissions were united on the priority of preventing tahr range expansion. Only the hunting submissions focused on details of what should occur in the management units outside the national parks. One submission said that there is priority to target and eradicate tahr on pastoral leases outside the feral range, in accordance with the Himalayan Thar Control Plan 1993.**

Outside the feral range and in exclusion zones: **All submissions that commented agreed that preventing range expansion was the highest priority for control of tahr. Some submissions said that all further effort in the 2020/2021 period should be focused in these areas.**

In other Management Units: **Within Management Units outside the national parks, hunters generally advocated decreasing the amount of official control from that set out in the Tahr Control Operational Plan 2020/2021. The reasons provided were:**

- **No species are confirmed to be threatened or at risk of extinction from the current densities of tahr.**
- **There are no updated scientific measurements to indicate densities exceed thresholds.**
- **The large number of tahr removed over the past two years has resulted in a considerable population reduction.**
- **Official control may not be required to achieve the Himalayan Tahr Control Plan 1993 targets as ongoing reductions following female biased harvest have yet to be realised.**

Two submissions provided detailed recommendations at the Management Unit level. In summary they said:

- **MU1: Reduce hours of control in MU1 pending monitoring of post-cull tahr density. Areas that are readily accessible to recreational hunters should not receive DOC control. Priority locations for official control are difficult to access areas where recreational hunting has least effect.**
- **MU2: One submitter said limited control as population is now low. Another submission said planned control would not reduce population to Himalayan Thar Control Plan 1993 intervention density. Control certain areas after further liaison. Target females, juveniles and non-identifiable males. Reduce female-kid groups to 10. DOC aerial control priority locations: Aciphylla Creek faces,**

true left of Lambert Creek, Willberg Range around Avalon Peak, Adams Range northern faces, Bettison Faces, true left of the Perth below the Scone.

- **MU3: One submission said the proposed control is unlikely to reduce populations to Himalayan Thar Control Plan 1993 intervention density. Another said some official control is needed in areas inaccessible to recreational hunters. Target females, juveniles and non-identifiable males. Reduce female-kid groups to 10. Areas that are readily accessible to recreational hunters should not receive DOC control. Priority locations for official control are difficult to access areas where recreational hunting has least effect.**
- **MU5: Some official control is needed. Target females, juveniles and non-identifiable males. Reduce female-kid groups to 10. DOC aerial control priority locations: Ben Ohau Range, Neumann Range.**
- **MU6: Some official control is needed in the inaccessible areas to recreational hunters. However, substantially reduce the planned control because the current proposal will reduce the tahr population well below the Himalayan Thar Control Plan 1993-specified target. DOC aerial control priority locations: true left of Jacobs, parts of the Landsborough (e.g. Zora).**
- **MU7: Cancel the planned control.**

5.1 OUTSIDE OF THE FERAL RANGE AND IN EXCLUSIONS ZONES

GAC (5)

The Game Animal Council recommends an expansion of tahr control effort outside the feral range, particularly in the south, and expansion of effort in the exclusion zones beyond the 168 hours last year.

NZTF (8)

Outside the Feral Range

We totally support a huge increase in control work outside the feral range to stop the spread of tahr both north and south. This work is especially important to stop them getting into Fiordland NP.

NZDA (12)

NZDA submits for the 2020/21 operational period that the plan should be to focus on the exclusion zones (north and south) and tahr known to be outside the feral range, with a particular focus on the south (because of the National Parks located there).

LINZ (11)

Additionally LINZ considers there is priority to target and eradicate tahr on pastoral leases outside the feral range, in accordance with the 1993 plan.

5.2 In other Management Units

SCI (9)

Inside the feral range, but outside the two National Parks, there is absolutely no urgency or justifiable need to undertake the hours of control proposed. It is clear that there is a lack of evidence to indicate urgency of control on the basis that;

- *No species are confirmed to be threatened or at risk of extinction from the current densities of tahr*
- *There are no updated scientific measurements to indicate densities exceed thresholds*
- *The large number of tahr removed over the past two years has resulted in a considerable population reduction*
- *Official control may not be required for the HTCP targets to be realised through time due to ongoing reductions following female biased harvest that has yet to be realised*

Maximum thar densities

"These limits are intended to be conservative."

If the priority for control is the exclusion zones and the Department needs to spend all the allocated monies on control, then SCI supports the targeting of exclusion zones and outside the range ferociously. 6a MU 7 is not above intervention density, so requires no control. GAC is proposing a method to deal with bulls in parks, so official control could target nannies in the parks, we all agree on this

NZDA (12)

By reference to the management units, NZDA submits Official Control should happen as follows:

- *Outside the range, extensive and sustained.*
- *Exclusion zones, sustained, with the use of its judas tahr programme*
- *MU#7, no Official Control. Over culled already.*
- *MU#6, some Official Control is needed in the inaccessible areas to recreational hunters.*
- *MU#4, official control should exclude hunter landing site areas and around all huts and tracks (3km buffer).*
- *MU#2, limited as population is now low, cull certain areas after further liaison.*
- *MU#5, some Official Control is needed.*
- *MU#1, limited Official Control, to large mobs and inaccessible areas.*
- *MU#3, some Official Control is needed in inaccessible areas to recreational hunters.*

GAC (5)

Management Units outside the national parks

Introduction

Alongside other place-related considerations, a primary focus in these management units is to attain the intervention densities. The Ramsey & Forsyth (2019) PCL tahr density estimates over the period 2016 2019 in these units are shown in Table 1.

Table 1:

MU	*PCL area (km^2)*	*Intervention density (tahr km^{-2})*	*N_{PCL}*	*PCL: Lower credible limit (tahr km^{-2}) [N_{PCL}]*	*PCL: Central measure (tahr km^{-2}) [N_{PCL}]*	*PCL: Upper credible limit (tahr km^{-2}) [N_{PCL}]*	*Approx. number shot on PCL by DOC in 2019*
1	*939*	*2.5*	*2,347*	*4.8 [3,721]*	*8.1 [6,182]*	*13.4 [10,269]*	*2504*
2	*813*	*2.0*	*1,626*	*2.5 [2,033]*	*5.3 [4,357]*	*11.3 [9,335]*	*240*
3	*1,422*	*2.0*	*2,844*	*6.0 [5,142]*	*10.0 [8,663]*	*16.9 [14,596]*	*1526*
5	*802*	*2.5*	*1,604*	*3.8 [1,757]*	*10.8 [4,950]*	*30.3 [13,951]*	*1532*
6	*674*	*1.5*	*1,011*	*2.3 [1,552]*	*4.6 [3,096]*	*9.1 [6,176]*	*1094*
7	*593*	*1.0*	*593*	*0.1 [65]*	*0.3 [169]*	*0.7 [438]*	*57*

- ***PCL areas are from Appendix 3 in Manaaki Whenua (2019) Overview of the current state of tahr knowledge. PCL = Area – (concessions + defence + freehold).***
- ***Numbers of tahr shot by others in each MU are unknown.***
- ***Excludes MU4, addressed in a previous section, and exclusion zones.***
- ***Credible limit estimates cannot be added to provide "overall" credible limits.***

To clarify the "gap" between PCL densities and intervention densities, the Council has estimated the PCL populations that are consistent with the HTCP intervention densities in each MU (using land area estimates from Manaaki Whenua) and compared those with the Ramsey & Forsyth population estimates. We also factored in recent control activity.

For example, the intervention density of 2.5 tahr km^{-2} in MU1 multiplied by the 939 ha of PCL results in an
"intervention population" of 2,347 tahr. Prior to the 2019 cull, this would have resulted in a "gap" of 1,374 tahr to the lower credible population limit, and a much bigger gap (3,835 tahr) to the central measure.

The Ramsey & Forsyth tahr population estimates cover four years, so whether they are representative of the population in 2019 depends on whether populations in each MU were static or not over that period. The data analysis did not assess that and, given the high variance in the data, and the relatively small samples within each MU each year, would be unlikely to shed light on existence, direction or magnitude of density change within MUs. Ramsey & Forsyth note that this may be possible with additional data in the future.

Departmental tahr control has occurred in all these management units in 2019, resulting in a significantly increased harvest in addition to "normal harvests". In addition, some culling occurred in parts of MU5 in 2018. All Departmental control has targeted tahr that are not-identifiable as males, which will have reduced reproductive capacity disproportionately to the population reductions since the period the Ramsey & Forsyth estimates apply to.

The Council's population projections are exploratory in nature. They make a number of assumptions, the significance of which can be tested by sensitivity analysis, but we have not done so. The

projections start from the central population estimates, which are imprecise. They include known culling kills in 2019, but other kills are estimates, although generally small in comparison to DOC's kills. Birth pulses are included, based on data from peer-reviewed scientific evidence, as is natural mortality.

The projections are sensitive to the estimates of DOC aerial mortality derived from helicopter hours. The Council has adopted the rate of 30 per hour the Department suggested at the June 2020 TPILG meeting. Kill rates are highly dependent on animal behaviour, snow conditions, time of year and other factors, so are extremely hard to predict, and are not a robust indicator of tahr densities.

The Department reports a somewhat higher kill rate than 30 tahr/hour in MU4 in July 2020. The AATH offset kill rate for 2019 was very much higher than that. Conversely, kill rates in low density and heavily vegetated areas are likely to be much lower. This factor, by itself is a cause for caution, with higher than anticipated kill rates having the potential to drive populations well below the intervention densities.

The Council welcomes the opportunity to work with the Department to explore variants on these assumptions if that would be of assistance.

It is important to allocate Departmental tahr-control effort, both within the management units and between units, to ensure the best environmental outcomes, to reduce future control costs, and to maximise benefits to the hunting community from the remaining tahr population. For all these reasons, control should target female tahr as far as possible. However, demographic effects are important, and mitigate against immediate attainment of HTCP-specified densities. Dramatic reduction in nanny numbers will, in some cases, result in continuing population decline, even without future culling. This means the HTCP target densities can be met in the relatively near future without culling to target densities level now. The Council is unaware of any imperative to attain the limits of the HTCP in the 2020-2021 year. Recognising that bull tahr need to be at least seven years old to attain trophy status, reduced recruitment from dramatic reduction in the nanny population will have unnecessary ongoing effects on trophy production for the next decade.

The Game Animal Council endorses the Department's phased approach (Principle 3), which relies on monitoring after significant control work to assess the need for additional work. This is particularly important given the proposed scale of control in 2020/2021. The Council advocates monitoring effects of culling in management units 1 and 6 after the initial 125-hour program (noting that this initial phase is 50% more than the September-November 2019 program).

Recommendations for each management unit include reducing female kid groups to a maximum of 10. The Council notes some ambiguity about this criterion as groups form and disperse on a regular basis and there is no guidance on what defines a "group".

There is considerable confusion about the maximum localised density of 5 tahr km^{-2} because the area this density applies to has never been defined. One interpretation, inconsistent with the maximum group size criterion, is that any group of five breaches the local density criterion. This is clearly not what the writers of the plan intended. Past plans have ignored this criterion because it is unworkable. The Council recommends continuation of that practice.

There will be some transfer of recreational and commercial hunting pressure as a result of implementation of this plan, particularly with the effective loss of hunting opportunities in MU4. Claims that access to hunting on non-PCL areas will mitigate loss of PCL hunting do not recognise the difficulty and/or cost of obtaining access to non-PCL lands. MU1 and MU3, which are highly popular

recreational hunting areas, will likely experience a significant increase in use. This increase in recreational use will increase recreational harvest, and therefore decrease reliance on DOC control.

The Game Animal Council recommends areas in MUs 1 & 3 that are readily accessible to recreational hunters do not receive DOC control, which should be concentrated on difficult to access areas within these MUs where recreational hunting has least effect.

There is considerable uncertainty about current tahr densities in each management unit. Culling has reduced the densities and changed the demographic structure of the tahr populations in those units. Consistent with the Department's staged approach (Principle 3) and adaptive management principles in general, the Council recommends monitoring the effects of the 125 hours of culling undertaken prior to finalisation of the Operational Plan. This is particularly important in MUs 1 and 6.

MU1: South Rakaia/Rangitata

The PCL lower credible limit estimated for the period 2016 density in MU1.

- *If the R&F lower bound estimates applied, it is highly likely that with control activity to date MU1 is already below PCL intervention density. Anecdotal evidence suggests that is not the case.*
- *Population projections are based on the Ramsey & Forsyth (2019) central population estimate, assumed to apply in Autumn 2019 (N = 6,182).*
- *DOC culled approximately 2,500 female and juvenile tahr in this management unit in 2019.*

MU1 PCL	Start of the year			Harvests		
Year	Total Population estimate @ start of year	Recognisable bulls	Nannies & Juveniles	DOC N& J control	All recognisable bull kills	Non control Nanny & Juv kills
2019	6,182	1,034	5,148	2,504	200	200
2020	3,408	707	2,701	750	200	200
2021	2,378	444	1,935	0	150	200
2022	2,210	293	1,917	0	150	200
2023	2,084	187	1,897			
PCL Target	2,347					

- *PCL control activity to date is unlikely to have attained the PCL intervention density at the central population estimate.*
- *Proposed control of 25 hours at 30 tahr/hour will result in removal of about 750 tahr not recognisable as males.*
- *This quantum of control is likely to reduce the PCL density to at or below the HTCP-target.*
- *A higher kill rate will almost certainly drive density below the HTCP-target.*
- ***Monitoring and an adaptive control strategy will be particularly important in this MU.***
- *Demographic effects mean the tahr population will continue to decline in subsequent years.*
- *Target females, juveniles and non-identifiable males.*
- *Reduce female-kid groups to 10.*

The Game Animal Council recommends reducing the hours of control in MU1 pending monitoring of post-cull tahr density.

DOC aerial control location prioritisation

- *Areas that are readily accessible to recreational hunters should not receive DOC control.*
- *Priority locations: difficult to access areas where recreational hunting has least effect.*

MU2: South Whitcombe/Wanganui/Whataroa

The PCL lower credible limit estimated for the period 2016 density in MU2.

- *If the R&F lower bound estimates applied, it is possible that with control activity to date MU2 is already below intervention density. Anecdotal evidence suggests that is not the case.*
- *Population projections are based on the Ramsey & Forsyth (2019) central population estimate, assumed to apply in Autumn 2019 (N = 4,357).*
- *DOC culled approximately 240 female and juvenile tahr in this management unit in 2019.*

MU2 PCL	Start of the year			Harvests		
Year	Total Population estimate @ start of year	Recognisable bulls	Nannies & Juveniles	DOC N& J control	All recognisable bull kills	Non control Nanny & Juv kills
2019	4,357	1,307	3,050	240	200	150
2020	3,849	910	2,939	750	200	150
2021	2,853	600	2,253	0	150	100
2022	2,803	424	2,379	0	150	100
2023	2,826	307	2,519			
PCL Target	1,626					

- *Control activity to date is insufficient to have attained the PCL intervention density at the central population estimate.*
- *Proposed control of 25 hours <u>at 30 tahr/hour</u> will result in removal of about 750 tahr not recognisable as males.*
- *This is unlikely to attain the HTCP PCL target density immediately, but demographic change effects may result in attainment of the target density in the near future.*
- *A kill rate greater than 30 tahr/hour has the potential to drive the population to the intervention density.*
- *Target females, juveniles and non-identifiable males.*
- *Reduce female-kid groups to 10.*

DOC aerial control priority locations:

1. *Aciphylla Creek faces*
2. *True left of Lambert Creek*
3. *Willberg Range around Avalon Peak*
4. *Adams Range northern faces*
5. *Bettison Faces*
6. *True left of the Perth below the Scone*

MU3: Gammack/Two Thumb

- *The PCL lower credible limit estimated for the period 2016 density in MU3. Subsequent control activity has been insufficient to achieve the tahr population density specified in the HTCP.*
- *Population projections are based on the Ramsey & Forsyth (2019) central population estimate, assumed to apply in Autumn 2019 (N = 8,663).*
- *DOC culled over 1,500 female and juvenile tahr in this management unit in 2019.*

MU3 PCL	Start of the year			Harvests		
Year	Total Population estimate @ start of year	Recognisable bulls	Nannies & Juveniles	DOC N& J control	All recognisable bull kills	Non control Nanny & Juv kills
2019	8,663	2,599	6,064	1,526	200	300
2020	6,577	1,894	4,683	600	200	300
2021	5,557	1,377	4,180	0	150	300
2022	5,343	1,055	4,288	0	150	300
2023	5,242	835	4,406			
PCL Target	**2,844**					

- *Proposed control of 20 hours <u>at 30 tahr/hour</u> will result in removal of about 600 tahr not recognisable as males.*
- *There were high kill rates in this MU in 2019, so there is every possibility that DOC will kill many more tahr than anticipated.*
- *This quantum of control is highly unlikely to attain the HTCP PCL target density.*
- *Target females, juveniles and non-identifiable males.*
- *Reduce female-kid groups to 10.*

DOC aerial control location prioritisation

- *Areas that are readily accessible to recreational hunters should not receive DOC control,*
- *Priority locations: difficult to access areas where recreational hunting has least effect.*

MU5: Ben Ohau

- *The PCL lower credible limit estimated for the period 2016density in MU5.*
- *If the R&F lower bound estimates applied, it would be highly likely that with control activity to date MU5 is already below intervention density. Anecdotal evidence suggests that is not the case.*
- *Population projections are based on the Ramsey & Forsyth (2019) central population estimate, assumed to apply in Autumn 2019 (N = 4,950).*
- *DOC culled over 1,500 female and juvenile tahr in this management unit in 2019.*

MU5 PCL	Start of the year			Harvests		
Year	Total Population estimate @ start of year	Recognisable bulls	Nannies & Juveniles	DOC N& J control	All recognisable bull kills	Non control Nanny & Juv kills
2019	4,950	1,485	3,465	1,532	100	150
2020	3,030	1,060	1,970	300	100	150
2021	2,429	749	1,680	0	50	150
2022	2,257	567	1,690	0	50	150
2023	2,142	440	1,702			
PCL Target	1,604					

- *Proposed control of 10 hours at 30 tahr/hour will result in removal of about 300 tahr not recognisable as males.*
- *This will not attain the HTCP target density on PCL but demographic effects will suppress recruitment.*
- *However, the Council understands there were high kill rates in parts of this MU in 2019, so DOC may kill more tahr than modelled in 2020.*
- *Target females, juveniles and non-identifiable males.*
- *Reduce female-kid groups to 10.*

DOC aerial control priority locations:

- *Ben Ohau Range*
- *Neumann Range*

MU6: Landsborough

- *The PCL lower credible limit estimated for the period 2016- PCL density in MU6.*
- *If the R&F lower bound estimates applied, it would be highly likely that with control activity to date MU6 is already below intervention density. Anecdotal evidence suggests that is not the case.*
- *Population projections are based on the Ramsey & Forsyth (2019) central population estimate, assumed to apply in Autumn 2019 (N=3,096).*
- *DOC culled approximately 1,100 female and juvenile tahr in this management unit in 2019.*

MU6 PCL	Start of the year			Harvests		
Year	Total Population estimate @ start of year	Recognisable bulls	Nannies & Juveniles	DOC N& J control	All recognisable bull kills	Non control Nanny & Juv kills
2019	3,096	929	2,167	1,094	50	50
2020	1,798	667	1,131	1,200	50	50
2021	432	432	0	0	10	0
2022	295	295	0	0	10	0
2023	200	200	0			
PCL Target	1,011					

- *Proposed control of 40 hours at 30 tahr/hour will result in removal of about 1,200 tahr not recognisable as males.*
- *Low tahr density may limit the kill rate, although not in hotspot areas.*
- *This quantum of control is likely to eliminate all non-male tahr from MU6 by 2021.*
- *Remaining resident male tahr numbers will steadily decline thereafter.*
- *Some remaining males will emigrate to other MUS in search of nannies.*
- *Target females, juveniles and non-identifiable males.*
- *Reduce female-kid groups to 10.*
- *There are localised high-populations in this MU, where control should be targeted.*

The Game Animal Council recommends a substantial reduction in planned control in MU6 because the current proposal will reduce the tahr population well below the HTCP-specified target.

DOC aerial control priority Locations

- *True left of Jacobs*
- *Parts of the Landsborough (e.g. Zora)*

MU7: Wills/Makarora/Hunter

- *The PCL upper credible limit for MU7 is below the intervention density. However, it is not above the numerical limit specified in the HTCP, which is inconsistent with the target density.*
- *Tahr control is not required in MU7 to meet the HTCP PCL density objective.*
- *Population projections are based on the Ramsey & Forsyth (2019) central population estimate, assumed to apply in Autumn 2019 (N=169).*
- *DOC culled approximately 2,500 female and juvenile tahr in this management unit in 2019.*

MU7 PCL	Start of the year			Harvests		
Year	Total Population estimate @ start of year	Recognisable bulls	Nannies & Juveniles	DOC N& J control	All recognisable bull kills	Non control Nanny & Juv kills
2019	169	51	118	57	10	10
2020	88	31	57	600	10	10
2021	15	15	0	0	10	10
2022	3	3	0	0	10	10
2023	0	0	0			
PCL Target	593					

- *Proposed control of 20 hours, even at a very low success rate, is highly likely to eliminate all nonmale tahr from MU7.*
- *Tahr extermination occurs even if the 2019 tahr population was at the Ramsey & Forsyth upper credible limit*
- *The small number of remaining resident male tahr would die or emigrate over the next few years.*

The Game Animal Council recommends cancellation of the planned aerial control in MU7.

Concluding comment

Based on the central R&F population estimates, the biggest "surplus densities" are in MUs 2 and 3, where the bulk of culling should occur. Indeed, under all density/population estimate scenarios, the biggest reductions should occur in MU2 and MU3, with about 50% more harvest in MU3 than in MU2.

6 SOCIAL AND ECONOMIC

Overview: **Submissions from hunters focused on the value of tahr as a trophy big game animal. It was said that tahr are now the most important big game trophy in New Zealand to recreational hunters. Tahr were also cited as a food source. Some argued that hunting is a legitimate recreational and commercial activity. They said that shooting bulls now has adverse effects for commercial and recreational hunters.**

COVID-19: **A key part of the context noted in submissions was the COVID-19 pandemic and its effects on tourism, including guided hunting. It was suggested that international hunter bookings will carry forward (rather than being cancelled) and therefore many more tahr will be hunted at once when the borders reopen. One submission discusses the potential for Jobs for Nature employment for hunters. They also note there will be no international hunting control this year, with the implication that official control is therefore more important.**

Relationship with the hunting sector: **Multiple submissions discuss loss of trust with DOC and/or a worsened relationship between DOC and the hunting sector. Submissions included that hunters have a unique stakeholder relationship in that they are part of implementation of the plan, the perception that DOC has "fostered the establishment of businesses around the tahr resource and has profited from concession fees & AATH offsets", and connections between hunter trust and willingness to provide data, including through the Tahr Returns App.**

Hunters as conservationists: **Multiple submissions discuss the contribution of the hunting sector to conservation initiatives. Some submissions note that as the relationship with DOC worsens, hunters will contribute less to conservation and, conversely, that working with hunters as a conservation resource will enable realisation of aspects of tahr control and research which have not been realised to date.**

Effects on recreational hunting: **One submission said that a failure to implement the Himalayan Thar Control Plan 1993 has resulted in an increase in availability of tahr for commercial and recreational use, with consequent legitimate expectations of continued access. It was said that livelihoods and a way of life were under threat. Recreational hunters said the majority of their tahr hunts are conducted on public conservation land. Some commented on the direct effects of control on hunters. They said the level of control proposed has the potential to damage DOC's relationship with landowners and hunters.**

Effects on commercial operations: **Tahr were said to be a draw card that also benefits other parts of the commercial hunting industry (e.g. red deer trophy hunting). Commercial operators said the vast majority of 2020 booked hunters have deferred or rescheduled their hunts until after the border opens. Bulls are of high commercial value, which will be important for COVID recovery. They said the total value of each mature bull tahr represents $14,000 to the commercial hunting industry. This is the sum of the trophy fee, guiding fees, lodging, taxidermy and trophy export. They argued that the industry needs to be able to incrementally adjust to any changes to the tahr herd dynamic. Conversely, one submission said many tahr would be left for hunters after control operations.**

Disturbance: **Some submissions said DOC contractors have recently shot tahr in the immediate vicinity of hunters. They state there is also potential for control operations to disrupt other Public Conservation Land users. They note this may reduce recreational hunters' willingness to use the Tahr Returns App.**

6.0 OVERVIEW

[redacted] (2)

5. *The Plan sets out a total population of tahr as well as population densities and herd sizes. Priority is given to commercial and recreational hunting to manage tahr numbers in accordance with these target limits, but official control and authority is held by the Department of Conservation (DOC). The total population, and in some areas population densities and herd sizes, most certainly exceed those limits. A failure to implement the Plan has resulted in the potential for heightened environmental degradation but also an increase in availability of tahr for commercial and recreational use. Harvest from recreational hunters is difficult to ascertain but the commercial harvest data indicates significant growth since the Plan was introduced noting that concession return irregularities misrepresenting actual numbers must surely exist.* [redacted] *recognise the need for a heightened level of control as outlined in the Tahr Control Operational Plan 2020/21 in an effort to build on the achievements of 2019/20 but only to the extent that it forms part of a non-linear approach towards an appropriate total population of tahr.* [redacted] *does not consider a total population of 10,000 as appropriate.*

NZCA (6)

18. The National Parks comprise 21% of the tahr feral range, and so there is significant alternate opportunity for tahr hunting in New Zealand to continue across 558,000 hectares of public conservation land.7

19. In addition to this, and prior to Covid-19, location data from Aerial Assisted Trophy Hunting concessionaires reveals that an average of only 67 bull tahr were declared shot per year in these two National Parks over the last five years. The hunting tourism industry that takes place within National Parks, is a niche one, for which the ecological sacrifice cannot be justified

Note: there is further information in letters to the Minister of Conservation attached to the NZCA submission. These do not appear to add materially to the material in the submission itself but may give perspective to the decision maker on how the NZCA reached its current position on tahr control.

6.1 COVID-19

[redacted] (2)

The Tahr Control Operational Plan 2020/21 when combined with successive control operations cannot ignore the legitimate expectation of commercial and recreational hunters to at least sustain current levels of harvest irrespective of the present global pandemic.

NZGHPA (4)

Our industry is currently facing extraordinary circumstances due to the closed border as a consequence of the global Covid-19 situation. Our international hunters, who make up over 95% of our client base, and more in terms of value, book 12 months, 2 years or more in advance. The vast majority of our 2020 booked hunters have deferred or rescheduled their hunts until after the border opens. We are currently still taking strong booking enquiries from overseas. When the borders reopen we are going to have a strong influx of overseas hunters. These guys and girls are going to kill a lot of tahr.

NZCA(6)

23. There are contemporary factors to consider when assessing the control needs for tahr in 2020-21. The impacts of Covid-19 have already had significant effects on control and monitoring operations planned between March and May 2020. Covid-19 will continue to require severe border restrictions, and so will continue to impact the international market and hunting tourism industry for an undetermined amount of time. This is an unprecedented situation and warrants the intervention of the Department to undertake control operations.

NZTF (8)

Covid 19 has not allowed the harvest of bulls that would have been expected this year, and to have the Department targeting bulls saying it's because the hunters haven't taken them is an absolute slap in the face.

SCI (9)

Following the Covid-19 pandemic, New Zealand is in a unique position to receive a higher number of international hunters than other countries. International hunters are high value, low impact tourists and will provide significant relief to the economy once they are permitted to return. SCI urges the government to rethink the plan and to reconsider how tahr hunting can contribute to economic recovery and management of the species. Even if our borders do not re-open for some time. Our tahr herd will continue to drive local tourism, with one helicopter operator on the West Coast currently flying around 1000 tahr hunters annually. The West Coast is really hurting at the moment and anything that can be done to improve local tourism should be a priority.

6.2 RELATIONSHIP WITH THE HUNTING SECTOR

GAC (5)

The Council is concerned that conflict around adoption of the Operational Plan has resulted in loss of the goodwill the Department and the Council had worked hard to establish between the hunting community and the Department. Unfortunately, one of the casualties may be recreational hunters' willingness to use the tahr kill reporting app. This will significantly increase the difficulty of monitoring recreational tahr harvests, which the HTCP requires. It is in everyone's interests that the

App has wide uptake. The Council will work with the hunting community to facilitate that. Adoption of the Council's recommendations contained in this submission will facilitate that process.

NZGHPA (4)

A follow through of the second 125 hours of the proposed operational plan without adjustment and due consideration of the hunting sectors recommendations or concerns will be damaging to DoC's relationship with landowners and hunters. For many years hunters have worked with DoC on conservation programs including predator control programs, trapping and in a partnership on wild animal control. Hunters and hunting groups are likely to turn their backs on any goodwill they've held toward DoC and the conservation partnerships we've seen fostered over the years. Already we are seeing examples of private land owners who have had long standing relationships with DoC and have in good faith allowed unhindered vehicle access by DoC staff across their land - now writing to the Director General stating that those arrangements are on hold and DoC staff will not be permitted to travel across their property until a proper consultation process is completed.

NZTF (8)

We absolutely do not condone anyone making threats of violence on either side of the debate, and have continually asked everyone to maintain the high moral ground and leave the stupid stuff out of it. But if there has been huge increase in threats, it does show how significant this issue is to a lot of New Zealanders.

The only threats we have personally seen are those to boycott the operators doing the highly contentious control work shooting bulls, and we would have thought that is a totally understandable reaction, especially from those whose livelihoods are going to be destroyed. It was disappointing to see the Operations Manager say publically "We are appalled that anyone is threatening to boycott legitimate businesses undertaking important control work…".

If the tahr densities are lowered in NPs to the extent the hunting resource is gone (which will happen long before getting down to zero density), then this is going to cause a large shift in hunting effort into the remaining areas inside the feral range. Not only the commercial sector, but all the recreational hunting that's goes on in the Parks will now be concentrated into a significantly smaller area, creating the sort of conflict we've managed to largely remove in recent years.

To minimise conflict we need to very carefully manage the tahr resource as we approach the HTCP MU limits. For the whole of NZs sake we need the herd to provide the maximum number of trophy bulls possible at these densities to not jeopardise the highly lucrative guided hunting industry that is hugely dependant on the tahr resource, and also the huge recreational hunting resource that has large flow on benefits for retail, accommodation, travel, hospitality and the local communities as hunters come from all over NZ to hunt tahr. It is also hugely important for our physical and mental wellbeing.

6.3 HUNTERS AS CONSERVATIONISTS

NZTF (8)

Hunter groups undertake many conservation projects all throughout the country and in a lot of areas are the only ones running large predator control programs – in the Ruahines, Kawekas and Kaimanawas in the central N.I. and the Wapiti area of Fiordland for example - and we have been working hard to establish and maintain good working relationships between the Department and all hunters. We have supported the development of the tahr app to help inform the control program. All

the good work that has been done is in serious jeopardy due to the way hunters have been treated over this 20/21 operational plan, resulting in having to go to court to get proper consultation by the Department. The whole country is watching this process intently to see if the Department is now going to treat the hunters fairly and use sound science as demanded in the '93 Plan in the development of the 20/21 operational plan. The app is almost certain to fail now thanks to the huge mistrust that has come about from the way the department has handled the tahr control issue.

DOC has fostered this whole tahr hunting resource, both guided and recreational, and needs to manage its control very carefully to balance both the needs of the environment and this hugely valuable resource.

6.4 EFFECTS ON RECREATIONAL HUNTING

NZDA (12)

To recreational hunters, tahr, particularly bull tahr, are highly prized as a trophy big game animal. It is arguable that tahr are now the most important big game trophy in New Zealand to recreational hunters. Tahr are also important as a food source.

Every year, each NZDA branch holds an Antler, Horn and Tusk (AHT) competition where tahr feature prominently. The NZDA holds a national competition in July where the best tahr trophies from all branches/members are entered and judged. The winner is awarded the Mount Cook Trophy for best tahr head by size. The tahr award is one of the trophies with the highest number of entries and prestige.

For a bull tahr to reach its trophy potential he needs to reach 7-8 years of age.

In summary, the importance of tahr to NZDA and recreational hunters cannot be overstated.

Supporting material – NZDA has provided the 1985 Levine report extract in relation to recreational tahr hunting as relevant context and support for our submission.

The importance of tahr was acknowledged in 1985 but today, in 2020, the statements need more emphasis because tahr hunting is now more popular and more important to recreational hunters than ever before. Please refer to page 138 of the Levine report regarding "the importance of Himalayan Tahr to Recreational Hunters" – this remains true today.

Tahr hunting is mostly done during holidays – long-weekends, public holidays and when taking annual leave from work. This helps DOC decide when to do Official Control to avoid conflict with hunters and ruining their holiday trips.

6.5 EFFECTS ON COMMERCIAL OPERATIONS

Mt Cook Trophy Hunting (3)

MOC says multi-million industry of commercial hunting is a cottage industry. Bull tahr 8 years to mature. Shoot the bulls there won't be a hunting industry. False information. All need to take a pull. Mike Slater is not here – [redacted] *– Mike will rubber stamp what you put in your report.*

NZPHGA (4)

To us it looks like the Minister and the Department have simply received a very large budget as part of the Government Covid splurge and have resolved to kill as many tahr as they can without pausing

to monitor where the herd is currently at, without modelling what the herd will look like after this intervention and without due consideration to the hunting sector - one of the largest commercial and recreational user groups of the Conservation estate. Nor have they considered the cultural and social implications of this.

While the Department hasn't stated an intent of eradication across the feral range, hunters have genuine fears that the current approach is the thin end of the wedge in this regard. The anti-introduced species ideology of the current Minister is well known to the hunting sector. We have witnessed her strong views on this for over 20 years. We feel that much of the current approach of the Department with regard to this ideology based- non-scientific approach to tahr management is largely due to the Minister's agenda which contradicts and obstructs the Department's usual consultative approach. Why else would the Department be rushing the culling of large numbers of tahr before the election without the science, research or modelling to back it up. The Minister and the Department are riding roughshod over the hunting sector. Our livelihoods and our way of life are under threat. The hunting sector in tatters would represent the loss of an important conservation partner.

Under any such management program the economic and intrinsic value of the tahr resource must be factored in. 166'000 New Zealanders hunt. Hunters are arguably the largest user group of our National Parks and Conservation Estate.

DoC must not forget its mandate to foster recreation on our public land. Hunting is a legitimate recreational and commercial activity and New Zealand enjoys a reputation internationally as a premiere hunting destination.

In my industry - the commercial guided hunting industry a sustainable tahr herd is vital to our livelihoods and the rural communities where we operate.

The commercial guided hunting industry in New Zealand brings in over $100 Million of direct overseas revenue annually. Tahr represent something over 20% of this value.

The true value of the tahr resource to our industry however, is more than just its raw monetary value. Tahr are an important drawcard species for the guided hunting industry. While international hunters can hunt red stags, our highest value species, in a number of counties around the world, they can only realistically hunt tahr in New Zealand. Many international hunters book their red stag hunt in New Zealand because they can also hunt tahr here. Without a viable tahr herd our industry stands to lose not only the revenue associated with tahr hunting, but also a significant portion of the revenue derived from the other high value game animals our visiting tahr hunting clients hunt while here on their tahr hunt including our lucrative private land game estate red stags.

Our industry directly employs 470 people in full time or seasonal employment and a further 64 people in the associated taxidermy and trophy exporting services.

At the 19th of June TPILG Meeting James Holborow stated that substantial impact to the commercial hunting industry will not occur as a result of the proposed operational plan. This is simply not true. Our industry will be severely impacted by the projected reduction in the tahr herd if the full extent of the proposed operational plan is carried out.

We've been told by the Department that a significant reduction in the tahr population on Conservation land won't be detrimental to the commercial guided hunting sector because most of our animals are hunted on private land or pastoral leases. While it is true that many of our members who guide foot hunts do chose to operate on private land or pastoral lease land due to a degree of

exclusivity and a higher degree of management, overall, the majority of our tahr hunts are conducted on Conservation Land. Many of our operators, particularly the larger businesses tend to do most of their tahr hunts as AATH. AATH is conducted almost entirely on Conservation Land, much of it in the National Parks.

To compound our fears we see the Minister and the Department looking at tahr populations on pastoral lease and private land. It's difficult for us to be relaxed about aggressive control operations on Conservation Land when we see the Minister and the Department eyeing tahr on other land tenures. The result of a marked reduction in trophy bull and breeding populations on pastoral lease and private land will see increased hunter competition for a severely diminished trophy bull resource on Conservation Land.

Numbers of tahr taken by commercial operators on Conservation land is trending up annually. Currently around 360 per year according to DoC concession return data.

The total value of each mature bull tahr represents $14,000 to the commercial hunting industry. This is the sum of the trophy fee, guiding fees, lodging, taxidermy and trophy export.

DoC has fostered the establishment of businesses around the tahr resource and has profited from concession fees and AATH offsets. Many successful businesses have been established and enterprising New Zealanders and their families have based their lives around the tahr resource.

A couple of examples from our NZPHGA membership that come to mind:

A young guide who has recently located [redacted] *to Twizel. They have bought a couple of acres of land and built a house. They have chosen this location because almost their entire business is based around guiding wilderness tahr hunts on Conservation Land. Without a viable public land tahr herd, their business will not be viable and job prospects for them in the Twizel area will be tough.*

Another example is a [redacted] *guide who has recently left a* [redacted] *contracting career and borrowed to purchase a* [redacted] *wilderness hunting outfit focused primarily on public land tahr.* [redacted] *face an uncertain future without a viable Conservation Land tahr herd.*

I could reel off scores of other examples of guides and outfitters who's businesses are dependent on a viable tahr herd. Some multi-million dollar businesses who's futures are dependent on the arrival of their booked overseas hunters when the borders reopen. Without a viable tahr herd these booked hunters may chose not to come and deposits will have to be refunded. Businesses will fail.

Then there are the taxidermists and exporters who's businesses are dependent on our overseas tahr hunters, and the helicopter operators who provide the air transport.

The industry needs to be able to adjust to any changes to the tahr herd dynamic incrementally. Any control intervention that will have a serious effect on the herd must therefore be implemented incrementally so that the industry can adapt. Such a dramatic impact on the tahr herd within a short period as would be expected from the proposed operational plan is unreasonable and unnecessary to be carried out in such a dramatically short timeframe, particularly when considering the 18,000 + animals already killed in the last 3 years. There is no rush to further reduce the population before establishing where it is at currently.

This on top of the impacts on the industry of Covid-19 and closed borders the level of proposed culling will place considerable financial stress on many businesses. While the Government is handing out

financial support to other sectors, the commercial hunting sector has received no support and it seems that the Minister and the Department are intent on driving nails into the coffin of the hunting industry.

GAC (5)

Shooting bulls now has adverse effects for commercial and recreational hunters. Bulls are of high commercial value, which will be important for COVID recovery. The historic harvest of bulls from the parks is not a guide to annual bull harvest once the border opens because nearly all bookings have been carried forward, effectively doubling harvest upon re-opening. Attaining a bull tahr trophy in the stunning national park environment is an aspiration for many recreational hunters. In short, the bulls have high value to the hunting sector, but have little importance for future environmental effects. If time spent culling bulls reduces the number of nannies culled, there is a significant opportunity cost to the environment from culling bulls.

SCI (9)

New Zealand is home to the only huntable herd of tahr outside of the Himalayas, making our tahr a very marketable resource, one of global importance. A trophy tahr hunt in their native range can cost between 25 to 30 thousand US dollars each, which means that expanding hunting opportunities in New Zealand could be viable for managing their numbers and generating much needed economic activity. To date the New Zealand government has yet to fully realise the value of our tahr resource, should the Department of Conservation be able to better regulate International hunters the tahr resource would fully fund a large number of conservation initiatives. On the other hand, the tahr population's decimation will cause severe financial harm to New Zealand's hunting industry, including, but not limited to, accommodation providers, helicopter operators, professional hunting guides, and safari and tourism operators. The plan fails to recognize the significant contribution of tahr hunting and viewing to New Zealand's economy. During a COVID-19-induced recession, preserving these hunting opportunities is essential to preventing dire economic consequences, as numerous jobs and businesses that are linked to the hunting of tahr will suffer if the DOC's plan is fully implemented. A considerable amount of the income generated by the hunting of tahr is spent in regions like Westland, areas that are currently really hurting in the wake of COVID-19.

NZAGE (13)

Note this submission could not be extracted as text so sections below are images:

Current situation facing NZAGE members

- NZAGE members are on their knees financially as a result of Covid-19.
- 2020 has seen just 10% of our operational season / income, but with 65% of operational costs.
- Every operator will be facing a catastrophic loss for 2020 and most likely 2021 too.
- This will mean 24 months with a greatly minimised income but with fixed costs and obligations that cannot be avoided, which limit owners / operators ability to pivot.
- The tourism industry is the hardest hit sector in the NZ economy and the game estate sector is arguably one of the worst hit within that.
- A significant number of member businesses and unaffiliated game estate businesses will fail in 2021 if borders remain closed, assuming no external intervention.

Effect of the proposed 2020/2021 Operational plan on Game Estates

- With the above as context, it makes the way in which the 2020/2021 Tahr operational plan has been approached by the Department all the more brutal - in terms of timing and intent.
- It feels like that while some tax-contributing industries are bleeding out with absolutely no end to the pain in sight, the Department has received a huge slice of taxpayer money, ostensibly for job creation and is forging ahead in an almost bloody-minded fashion with a plan to kill as many tahr as possible in a short timeframe, with zero consideration to the consequences and minimal benefit to employment or the economy.
- It appears that the losers on the day are due process; specifically the requirements for consultation and ongoing research and monitoring.
- The other big losers, of course, are those who value or depend on tahr as part of their livelihood.
- On the question of principles - can the Department really say they have acted in good faith?
- The phrase ‘being kicked while we’re down’ does not seem inappropriate here.

The value of tahr to GE's

- The direct value of a bull tahr to NZ has been estimated at $14000 per animal, made up of trophy fee, guiding, lodging, transport, taxidermy and expediting.
- This figure reconciles with the value most commercial hunting operations derive from tahr as part of their trophy options.
- Based on the $104m annual revenue of the guided hunting industry, it can be safely assumed that tahr are directly accountable for over $20m of this figure.
- The true value of the tahr resource to our industry however, is more than just its raw monetary value. Tahr are an important drawcard species for the guided hunting industry.
- International hunters can hunt red stags in a number of countries around the world, but can only hunt tahr in New Zealand. Many international hunters book their red

stag hunt in New Zealand because they can also hunt tahr here. Without a viable tahr herd our industry stands to lose not only the revenue associated with tahr hunting, but also a significant portion of the revenue derived from the other high value game animals our visiting tahr hunting clients hunt while here on their tahr hunt, principally, our lucrative private land game estate red stags, plus the non-hunting tourism revenue derived from companions, touring and retail.

- There is a strong argument to be made that were it not for the option to hunt tahr, many hunters would instead opt to hunt Red Stag in a rival location such as Argentina which is cheaper, closer and more accessible to our core US market.
- To not have a viable bull tahr population in National Parks, adjoining public land and by future extension, crown pastoral lease and freehold private land, game estates outside the feral range would experience a massive reduction in our ability to fulfil existing contracts, satisfy client demand and generate future bookings. This would be due to conflict from displaced commercial and recreational hunters putting pressure on a diminished resource that may not be able to sustain future demand.
- This would further hamper our recovery from Covid and may assist in preventing it entirely at a time that NZ can ill-afford to lose a valuable high-yield, low-impact export tourism industry.
- Many game estate operators have remarked that it is difficult to watch your livelihood evaporate while a key resource in any potential recovery risks decimation via a state-sponsored agenda.

6.6 DISTURBANCE

GAC (5)

Several recent DOC tahr control operations have resulted in DOC contractors shooting tahr in the immediate vicinity of hunters. A tahr hunting trip can be a major undertaking, and involves considerable planning and expense, so these encounters are particularly disappointing. There is also potential for disruption of other PCL users.

Better communications of dates and locations of aerial control activities would avoid many such conflicts. While it is recognised that weather and security mean it is not possible to identify precise dates of operations in particular areas, many of these effects can be mitigated, at least in part, by an indication of planned operation windows for particular locations or MUs. The Council notes some attempts to mitigate these effects by cull operators who have contacted other helicopter operators in the vicinity to avoid operating in areas where they have dropped clients. While meritorious, this approach fails to account for the vast majority of PCL users, who do not use aerial access.

[redacted] **(7)**

No WARO or AATH or culling within 1 KM of Huts or known campsites, any non standard operation in the Parks needs to advised to the user groups as per User Group requirements, DOC culling should be done in July AUG Sep when most hunters have finished and before nannies have kids, do the culling in July away from where hunters will be, Wilderness Tahr Blocks should start first weekend of May and finish 2nd weekend of July,

NZTF (8)

In the last few weeks there has been several cases of recreational hunters having what for some of them is their hunting trip of a lifetime ruined by the Department's control operations occurring all around them with no prior warning. Some of them have spent considerable money and time travelling down from the North Island, only to have their experience destroyed, and put through in their words "a really scary experience" with shooting all around them and the shot tahr setting off wet slide avalanches in their vicinity. This is entirely preventable. All the Department needs to do to avoid the time and place conflict is give at least a week's warning when an area is going to receive control - not the specific dates - so hunters' and other PCL users can plan their trips accordingly.

SCI (9)

SCI agree with other stakeholders that the Department must avoid controlling tahr in the vicinity of huts and operators should also check known campsites before commencing culling operations. It costs considerable time and money to reach remote locations and it should be of the upmost importance for the Department to ensure recreational users have positive wilderness experiences. No culling within a 2km radius of huts would be a sensible clause to add to the 2020/ 21 plan.

SCI would also like the Department to maximise hunting opportunities for hunting sector. In the near future there will not be a great deal of work for helicopter operators in places like Franz Josef Glacier and Fox Glacier. Enabling these operators to drop recreational hunters and guided parties into remote areas of Westland National Park would be a great initiative for regional spending and is the preferable method to reduce bull tahr numbers in the National Park. Conservation projects, such as running and servicing stoat lines to protect whio could be a condition of the permit to land.

7 LONG-TERM PLAN

Overview: **One submission said a long-term plan that sets out how control parameters will be met needs to be completed as a matter of priority.**

F&B (1)

ABSENCE OF A PLAN TO ACHIEVE THE CONTROL PLAN NUMBERS

9. Another issue that has troubled us for some time is the absence of a long term plan to achieve the control plan requirements (e.g. overall population, intervention densities and control parameters).

10. Tahr numbers have got out of control because of a sustained failure to undertake the required control.

11. DOC has constantly indicated that it needs time to undertake the control work that is necessary to achieve the control plan numbers. However, despite resuming control efforts more than two years ago, no detail has been provided about how and when the control plan will be achieved.

12. The absence of a long term plan is undesirable as it creates uncertainty for all stakeholders. We consider that a plan that sets out how the control parameters will be met needs to be completed as a matter of priority.

8 REVIEW OF HIMALAYAN THAR CONTROL PLAN 1993

Overview: **Two submissions (and one other organisation in support) argued that the Himalayan Thar Control Plan 1993 is outdated and needs to be reviewed. The arguments were:**

- **To reflect modern expectations and provide consistency across the statutory and policy framework (to remove the requirement for zero density in national parks).**
- **To enable all user groups and stakeholders to reengage in constructive consultation to ensure tahr are effectively managed and conservation values upheld.**

[redacted] **(2)**

5. Much of the statutory and policy framework directing tahr control for environmental purposes is no longer aligned with the total cross section of public interests. There exists an apparent disparity between different classes of Public Conservation Land (PCL) which creates unnecessary conflict. [redacted] *supports the implementation of the Tahr Control Operational Plan 2020/21 when combined with successive control operations except for moving towards achieving zero density within National Parks. Prior to the commencement of 2021/22 control operations* [redacted] *would move that DOC should update the Plan to reflect modern expectations and provide consistency across the statutory and policy framework.* [redacted] *understand the inherent difficulties with addressing such documents but sincerely hope that common sense could prevail…*

CACB (10)

The Board would also like to reiterate their previous recommendation to the Minister of Conservation (letter dated 5 March 2019) that there be a full review of the Himalayan Thar Control Plan 1993. It is our view that the 1993 Plan, being more than 25 years old, is somewhat outdated. A revision of the Plan would allow all user groups and stakeholders to reengage in constructive consultation to find solutions to ensure that tahr are effectively managed and conservation values upheld.

9 PROCESS

Overview: **Submissions commented on the process involved in forming the Tahr Control Operational Plan 2020/2021 and on processes more generally involved in the management of tahr.**

Tahr Control Operational Plan 2020/2021 process: **Several submissions said that any comment they made before being informed of the department's proposed quantum of control should be set aside. Hunter submissions said the process for 2020/2021 had led to a loss of trust in the department. Some said that the department should have provided more information and clearer explanations of its proposals. Several had concerns that they could not properly submit without knowing about the control operations completed after 1 July 2020.**

Tahr management process: **One submission affirmed principles set out by the department in the 2018 operational plan. Others referred to the inter-relationship of tahr control and the value of hunter goodwill in wider conservation activity, including maintaining huts and dealing with pests. One submission proposed that DOC introduce a dedicated tahr liaison staff member, based in an office near the tahr herd, who is mandated to carry out effective recreational hunter and hunter organisation liaison. This submitter also requested that DOC comply with the reporting prescription set out in Appendix 8 of the Himalayan Thar Control Plan 1993. Mention was made of potentially contracting hunters to undertake control as provided for in the Himalayan Thar Control Plan 1993. One said that all official control should be by heli-operators, with no ground hunters. Extending the tahr ballot period was also proposed.**

9.1 TAHR CONTROL OPERATIONAL PLAN 2020/2021 PROCESS

Mt Cook Trophy Hunting (3)

Achieved a trustworthy relationship with DOC back then. Planned things with the old boys. Did the culling on the nannies, not bulls. Biggest problem back then was the funding. Had to work on the exclusion areas and do the best they could with the money. Now we got the money and we have no plan. Seem to have a regime of elimination. That's a bad word. Destruction, extermination. Barstadised these beautiful animals into a situation where there is a culture where the younger hunters see them as a nuisance and a pest. No pride in shooting. Doing a great job for DOC going out and leaving them on the ground.

Culture coming through DOC = lies, deception, corruption, blackmail, bullying. Caused most of the people losing trust in DOC and the Government and police and the army. Collection of people to put something together like we used to.

Coordination is not here. You guys do not seem to be listening. Spent untold hours individual seen us and recorded. Something missing. Who is making the decision. Not getting put into place. Where are the words extermination and elimination coming from? Just firing money at it won't work.

Cooperation needs trust. DOC to reform trust in the relationship.

[redacted] *plan – detail available on dividing the blocks. Human side to this. More uncertainty placed on the table.*

Hunting becomes part of a person's life. Some facts spread about do not appear to have been true. Barriers for some hunters to get into the hills – locks on gates etc. Don't really know.

Implore trust. Honestly, what people say in this room will make a difference.

NZPHGA (4)

The NZPHGA strongly opposes the extent of the proposed 2020/2021 Operational Plan and the rushed manner in which it is being actioned without a robust assessment of the current state of the tahr herd or modelling and population projections on what the herd will look like after the proposed operations are complete.

GAC (5)

The Department engaged with the Game Animal Council prior to release of the Department's original proposed plan. The Council's advice and opinions during that engagement were made on the expectation that the Department's operations would be of a similar scale to the 2019/2020 operations. The proposed plan that emerged subsequent to that engagement entailed a very large increase in Department tahr control activity, making the information the Council provided in the previous consultation largely irrelevant. The same will be true for other consultees. Consequently, it is the Council's opinion that the information the Department obtained from that earlier engagement activity should largely be set aside.

While the Operational Plan clearly identifies the quantum of DOC control activity (specified as hours of flying time), and the various groups who contribute to tahr control on PCL in each MU, there are several important omissions:

- *Justification for the number of hours of DOC aerial control in each MU*
- *PCL tahr population targets for each MU*
- *Identification of, and reasons for, priority control locations within each MU*
- *Timing of DOC control operations*

Clarification of these matters may have prevented some misunderstanding and would have formed a sound basis for discussion of the effects of the Operational Plan. A full agenda, and a focus on the overall quantum of proposed DOC control activity, at the previous TPILG meeting prevented discussion of these matters. The Council recommends that future draft operational plans should lay these matters out clearly, ensure there is adequate time prior to the TPILG for their consideration, and devote adequate time to their discussion at TPILG to consider the broad range of perspectives represented on the TPILG.

NZTF (8)

Firstly, we need to register that we are struggling to understand how we are supposed to submit on the whole 20/21 Plan, when half of the projected hours have most likely been done, and we don't know what the result of the first 125 hours – how many tahr have been killed in what MUs. We are struggling to see how what we are contributing here can be seen as the full consultation required by the High Court without this important data.

Also, any previous engagement between the Department and the NZTF in May/June and responses back from us this year cannot be taken as consultation with us. The scale of this year's plan was never conveyed to us and we presumed it was going to be similar to last year as when asked, DOC did not answer the question of how many hours they were going to be doing or the magnitude of the draft 20/21 plan. The issue of bulls in National Parks has been mentioned every year, but never acted on, and we presumed the same was going to be the case this year – especially considering the effects of Covid 19 on the guided and recreational hunting industry.

Important Clarifications/Ramifications

We are not responsible for either control or monitoring under the HTCP. That responsibility clearly lies with the Department. The Department has allowed a lot of misleading statements made in this regard to go unchallenged in the media. Hunter representatives have always acted in good faith working with the Department on tahr control. We have continually said the Department is only doing its job all the way through this process, and not to shoot the messenger so to speak. We feel the Department has certainly not reciprocated, or remained as impartial as it should have with its communications.

The vast majority of hunting is done on public land, and the department's insinuation and statements that the majority is done on private land is totally untrue. If the reporting shows otherwise then that is an issue with the Department's reporting systems. The AATH data they do have show's a rapidly increasing percentage of AATH trophies coming out of National Parks, and that is not fairly represented by reporting an average number of trophies over the 5 years. We have no data for the number of tahr taken by recreational hunters in NPs, but arguably hunters are the largest users of the NPs including the back country huts and facilities away from the tourist walking tracks. The largest helicopter concessionaire for the West Coast tells us that hunters are their biggest clients by far after the tourist flights, especially in Westland NP. (pers. comm. [redacted])

SCI (9)

SCI welcomes the opportunity to engage in consultation, both verbally and in written form. However, we are disappointed that the relationship between the Department and the hunting sector has deteriorated to the point where the Department feels the need to have extensive security measures in place at meetings. This is a clear indication that the Department is failing to engage adequately and constructively with the hunting sector. Those representing the hunting sector present at the meeting were articulate, intelligent and good law-abiding members of the New Zealand Public. There is no ill personal intent, only a dedication to invoke change for the benefit of both conservation and the quality of life for all New Zealanders. The Department is here to manage our conservation estate for the benefit of the New Zealand Public. As such, we have expectations that reasoned decisions based on sound management practises are presented for comment which make use of progresses in knowledge. The hunting sector provides well thought out technical advice based on experience in operational, scientific and social applications. Unlike other stakeholders we are also a large part of the actual implementation of the plan. Therefore, we have a reasonable expectation to be involved in

the forming of annual or other plans so that we can agree and support our role in its implementation. This process has been largely lost and so too has the trust between the Department and the hunting sector which is required for positive conservation outcomes throughout Aotearoa. This loss of trust has been further perpetuated by the Department beginning culling following the court hearing without talking to the hunting sector first, and not supplying full information to stakeholders prior to or following the commencement of any operations. While the judge gave leave for the 125 hours to occur at DOC's discretion, "can," "must" and "should" are not the same. This course of action suggests to SCI that DOC does not consider the hunting sector's concerns valid or our advice important and this was certainly conveyed during the court hearing. SCI maintains hope, but expects that the resulting 2020/21 plan following this consultation will clarify the Departments position.

DOC cannot hope to implement the HTCP though all time without the hunting sector. SCI verbal presentation sort to form an organisational structure, which gave each stakeholder and implementor their own purpose and targets to be achieved. That promotes team work and cooperation to achieve environmental goals that are sustainable through governments, but have checks, balances and accountability. This is a no brainer and SCI invites the Department to work through the process of this operational restructure for the success of future operational plans.

NZDA (12)

NZDA notes it had pre-prepared to participate in consultation only on the remaining 50% of the 2020/21 operational plan, as the High Court ordered DOC, therefore our preparation and input had reflected that assumption. DOC, however, said at the meeting the entire 2020/21 plan was under review under this consultation process. NZDA noted verbally its concern with this late change in DOC's consultation process. This written submission can apply to the entire 2020/21 operational plan.

NZAGE (13)

GE's preferred approach to Management

To be clear - the NZAGE 100% appreciates the need for tahr management. We have always supported the idea of a staged management approach based on sound research, monitoring and consideration of effects on all interested parties.

To date, that research and evidence seems to have eluded us. This brings us to the core problem - which is, on one hand:

- If we reduce the tahr herd below what constitutes a sustainable hunting resource without undertaking the appropriate research and monitoring, it will take years to recover. This has immediate and long term negative implications for our industry.

And, on the other hand:

- If we backed off on the urgency of the timing and resolved to maintain the current population levels while we undertake the science prior to re-implementing the plan,

we regain trust, goodwill and partnership from the hunting sector for minimal adverse effect.

It would appear that the consequences of pressing ahead regardless are way out of balance with the consequences of undertaking research and monitoring first. One would have to question why this is the case?

The NZAGE believes that the remaining budget for the 2020 / 2021 Operational Plan should be directed towards research and monitoring before undertaking further flying & culling operations.

[redacted]
President, NZAGE

9.2 TAHR MANAGEMENT PROCESSES

GAC (5)

Department of Conservation Principles for operational plan development

In 2018 the Department proposed the following principles to guide development of annual operational tahr control plans. The TPILG wholeheartedly supported adoption of the principles. The GAC believes they provide a valuable guide to finalisation of the current operational plan.

Principle One: Partnership

The Department of Conservation (DOC) has an active co management partnership with Ngāi Tahu under the Principles of Te Tiriti o Waitangi, strengthened further by the Ngāi Tahu Claims Settlement Act. The Department will operate in a programme partnership with all stakeholders to work together to achieve the outcome sought. Regular Tahr Plan Implementation Liaison Group meetings are held to update and share information and support decision-making.

Principle Two: Status of the Himalayan Thar Control Plan 1993

The Himalayan Thar Control Plan (HTCP) 1993 is the guiding statutory document under the Wild Animal Control Act 1977 for managing the tahr population.

Principle Three: Phased approach to Implementation

The control programme for tahr is to operate under a phased approach at a management unit scale:

control operations → monitor → report → review → revise if necessary

Principle Four: Information sharing and transparency

Data and information will be shared openly between all parties to achieve the objectives of the plan. The control and monitoring efforts of all parties are recorded and reported. The DOC website will display all the information collected by all stakeholders.

Principle Five: Increased effort is required to meet the Plan objectives.

The control effort will be undertaken, based on the following Himalayan Thar Control Plan objectives.

A. *To provide for recreational, commercial, guided hunting and Departmental control as means of maintaining tahr at, or below, target levels.*

B. *Scientific information is the basis for assessing vegetation condition and tahr population to inform management decisions.*

C. *To prevent expansion of the breeding range of tahr control activity outside of the feral range of tahr is a priority.*

D. *The protection of known, high value, ecological sites which are at risk to tahr impacts with each management unit is a priority.*

E. *Tahr will be controlled over time to a level at, or below, the intervention density set for each management unit within the HTCP as informed by scientific research and monitoring*

F. *The most efficient and effective control methods for tahr population reduction will be used, including concerted effort by recreational and commercial stakeholders, and DOC control.*

The Game Animal Council agrees that tahr populations exceed intervention densities in some MUs, but concludes there is no imminent threat, either to the environment or of a significant population increase, that would support the need for urgent action. Consequently, there is no case for putting aside the phased approach of Principle Three: Phased approach to Implementation.

[redacted] (7)

Any WARO, AATH or Culling to be advised to the User Group 24 hours before it is done.

Consultation should have input into the Tahr Plan not just a tick in the box to say consulted.

LINZ (11)

We are making this submission to acknowledge the need for the Department of Conservation and Land Information New Zealand to work together on tahr management in the South Island high country. We want to ensure this land and its ecosystems are maintained if not enhanced for the benefit of all New Zealanders.

NZDA (12)

NZDA submits that DOC introduces a dedicated tahr liaison staff member, based in an office near the tahr herd, who is mandated to carry out effective recreational hunter and hunter organisation liaison, as contemplated by the Plan. That person needs to understand tahr hunting and manage hunting stakeholders and be willing to work with NZDA branches relevant to the tahr herd and hunter-lead control.

NZDA submits that DOC must meet its obligations under Part 5, including for the 2020/21 operational period, and all future operational periods.

If DOC cannot do this then it should seek to have GAC undertake this function on its behalf.

The GAC was not a statutory body when, in 1993, the plan was created. Therefore, many of DOC's functions should logically be delegated to GAC, which aligns with GAC's core function.

In NZDA's view, the hunting community are likely to be more receptive to information sharing with GAC because there is a lack of trust in DOC presently by the hunting community.

NZDA is open to discussion regarding [contractual] *arrangements with DOC.*

DOC can propose something in this regard and NZDA would constructively work with DOC to reach tahr population density goals in areas managed by NZDA branches.

Developing each 'operational plan' for each year contemplates a "proactive approach and cooperation" including by DOC with "various interest groups", including NZDA.

NZDA would like to see DOC meeting this obligation and reflect the mandated stand of interaction. NZDA contends, agreeing a plan is not about "consultation" it is about working together. NZDA recommends DOC changes its approach so that it working with NZDA, SCI and the Tahr Foundation – with oversight by the GAC.

NZDA also submits that DOC should undertake the work to prepare the information required to populate the Appendix 8 report. The report should be shared with hunters and hunting organisations for their information.

10 BIODIVERSITY

Overview: **All submissions that commented on indigenous biodiversity affirmed its value but differed on whether it was being affected by tahr. One argued for tahr to be recognised as a valued part of biodiversity in New Zealand.**

Indigenous: **Some said there was no certain information on the density of tahr that would cause adverse effects on native vegetation. They stated there is no imminent threat, either to the environment or of a significant tahr population increase, that would support the need for urgent action. Conversely, another said native flora are ill-equipped to defend against these grazing mammals. The grazing behaviour of tahr, they said, damages endemic flora, such as tall tussock, Mount Cook buttercup, NZ veronica, and Godley's buttercup, which is classed by the NZ Plant Conservation Network as threatened and nationally endangered. They said this damage has lasting implications for a variety of fauna, including insects, moths, birds, and alpine lizards.**

Tahr: **One submission argued that tahr are listed as a near threatened species on the IUCN Red list and that New Zealand is the last stronghold of tahr. Another said the failure of other countries to conserve tahr should not lead to allowing them to adversely affect native biota here. They did comment that tahr farming in New Zealand might help with conservation of tahr in the Himalaya.**

10.1 INDIGENOUS

NZPHGA (4)

We value our native biodiversity and have always supported and played an integral part in tahr population control. We understand culling is necessary.

We hear anecdotal claims of the damage tahr do to certain native alpine plant species, but we are yet to see the science to back these clams. We know tahr eat native vegetation but we don't know at what densities this is at an unacceptable level with regard to many of the specific plant species. Let's get some facts and manage tahr densities around science area by area.

GAC (5)

No evidence has been provided by anyone that tahr at current densities threaten any vegetation species. While tahr are known to have significant localised effects at very high densities (as experienced in the 1970s), research conducted since the implementation of the HTCP has not identified any specific threats. Despite claims of its imminent demise, the threat status for Ranunculus lyallii is "not threatened". It is common, even where tahr densities are high. Diet studies have shown that R. lyallii is an extremely minor component of tahr diet, and is eaten much more by other herbivores. This claim, like those for other floral species, simply does not stand up to scientific scrutiny. At the TPILG meeting on 3rd August 2020, no-one made any claims that any species is in imminent threat from tahr.

The Game Animal Council agrees that tahr populations exceed intervention densities in some MUs, but concludes there is no imminent threat, either to the environment or of a significant population increase, that would support the need for urgent action. Consequently, there is no case for putting aside the phased approach of Principle Three: Phased approach to Implementation.

The Council notes the lack of scientific evidence to support the need for immediate culling of all tahr in the national parks. However, it notes a number of unsubstantiated claims in the media. An example is a claim that eliminating tahr in the national parks is necessary to protect the Aciphylla weevil. Since that extremely rare weevil is not found in either park, culling tahr in the parks will not have any effect on the weevil. Further, claims that tahr threaten Ranunculus and Veronica species in the parks are not substantiated by either the official threat status, or by scientific research. Consequently, there does not appear to be any environmental imperative to remove all tahr from the national parks immediately, even if the aim is eventual elimination.

NZCA (6)

15. *Himalayan Tahr were introduced to New Zealand in 1904, and so our native flora are ill equipped to defend against these grazing mammals. The grazing behaviour of tahr damages endemic flora, such as Tall Tussock, Mount Cook buttercup, NZ Veronica, and Godley's buttercup, which is classed by the NZ Plant Conservation Network as threatened and nationally endangered. This damage has lasting implications for a variety of fauna including insects, moths, birds, and alpine lizards.*

16. *With the impending escalation of climate change effects, we must do all we can now to ensure that these endemic and native species are provided the protection assured to them under the status of National Park.*

LINZ (11)

We are making this submission to acknowledge the need for the Department of Conservation and Land Information New Zealand to work together on tahr management in the South Island high country. We want to ensure this land and its ecosystems are maintained if not enhanced for the benefit of all New Zealanders.

FMC (14)

Equipoise – overstated alpine lizard, or pen wiper might not see it like that. [redacted] *want empirical science at the top of the list to consider in the research programme. Determining the scope of the workplan. Tahr conservation – beyond our shore and in a philosophical way we should be interested in the conservation of all species– outside the operational rohe of DOC to do that – NZ*

native species should not suffer for the dereliction of other countries. Tahr going down to the bush – have seen for a long time – needs to be attended to. Human colonisation has altered Aotearoa in a very short time. Nature far more depauperate.

10.2 TAHR

NZPHGA (4)

Tahr are listed as a near threatened species on the IUCN Red list. New Zealand is the last stronghold of tahr in the world. As a comparison, the global population of white rhino is estimated at around 18,000, far more animals than there are tahr in their native range. If New Zealand had a wild population of white rhino would we be culling them indiscriminately, without sound science to back it up?

FMC (14)

Tahr farming here could preserve a good back up population for the Himalaya.

11 RESEARCH AND MONITORING

Overview: **All submitters that commented on research and monitoring agreed that an integrated research and monitoring programme for tahr was essential. Some argued that the most immediate need was for accurate information on tahr populations, including densities and age and sex data in management units #1, #2, #3, #5 and #6. Vegetation condition monitoring was affirmed as a priority, but submitters accepted that this would take some years to show significant trends. One said that it was important to gather accurate information on the control exercised by recreational hunters.**

NZPHGA (4)

The Department of Conservation have an obligation under the 1993 Tahr Control Plan to base intervention on science and research. With sound science, research and monitoring we believe we can collectively manage a sustainable tahr herd that meets the needs of the hunting sector while providing positive conservation outcomes for our native biodiversity.

The NZPHGA supports the research initiative currently underway by John Parkes on contract to the Department of Conservation and recommends that future operational plans are based on research of the herd and area specific impact on vegetation as required under the 1993 Himalayan Tahr Control Plan - with the economic and inherent value of the tahr resource factored into the equation.

GAC (5)

The Game Animal Council lauds the Operational Plan's intent to progress research into tahr-related matters that will be of significant assistance in guiding future operational plan development.

NZCA (6)

27. The NZCA strongly supports the work proposed to develop an integrated research and monitoring programme.12

28. The HTCP recognises the need to continue to monitor and undertake further research. This will enable the Department to accurately assess the impacts of tahr control environmentally, culturally, and economically.

The NZCA submits that: the development of an integrated research and monitoring programme should appear as a priority in the Tahr Operational Plan 2020-21.

[redacted] (7)

More vegetation monitoring needs to be done

NZTF (8)

The '93 Himalayan tahr control plan set out to find out what density of tahr would not have an unacceptable effect on our indigenous vegetation across the various MUs, while still providing a viable hunting resource to enable their contribution to tahr control. Success for us would be being **able to answer that question.**

SCI (9)

The call for research, as is part of the HTCP plan, was promoted by all stakeholders at every meeting over the past two years.

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"5.2 Monitoring Thar control

"It is desirable that improvements to monitoring of hunter success be sought. Such statistics are an integral part of the data required to determine regional trends in thar population size and to ensure target densities are not exceeded."

Other than basic population monitoring pre 2019 culling, the Department has only in the past two months begun to work towards identifying research goals and nothing of substance has been presented to date. Making management decisions so blindly is a recipe for disaster, and the concerns of stakeholders in this regard are well founded. SCI hopes the Department applies more careful decision making for management of our endangered species. Dr Ken Hughey, present at the recent meeting, indicated that it could take three - four years to obtain the research we need to make sound decisions. We should be at least half way there by now, with a far greater understanding and growing knowledge base. With this delayed start, SCI understands that the full extent of research required will take time. However, we expect even partial knowledge will provide a better indication of direction for decision making than none at all. Therefore, SCI advises as much research as possible be undertaken prior to next year's operational plan and SCI commits fully to assisting in the acquisition of the required knowledge. There is negligible risk in taking this approach, given tahr have been existing in the feral range at higher density than they are currently for many years, not resulting in irrevocable conservation outcomes.

A major scientific effort for sound decision making will also create jobs, support post covid-19 recovery, gain public buy in / trust and rebuild relationships between DOC and the hunting sectors.

NZDA (12)

NZDA notes that DOC, the Minister of Conservation, and the Conservation Authority all state (repeatedly) there is a lack of recreational hunter data or accurate data, which it has known for some time, yet DOC has not undertaken any proactive steps to gather that missing data. The lack of data is

used to support the statement that recreational hunters are not controlling any tahr – this is not true. DOC has an obligation to survey hunter and hunting organisations. It should do the survey urgently. In the meantime, DOC should use and apply the data in the NZDA survey in the absence of better information.

NZDA submits that DOC should do the data gathering and monitoring, especially of the tahr population this calendar year. Tahr densities and population, including age and sex data, need to be ascertained in management units #1, #2, #3, #5 and #6. These are important units to recreational hunters and require sufficient animal numbers to ensure hunters and their families can enjoy their recreation and put food on the table. This information should be used to assess the effects of Official Control and inform the need for any additional culling in the coming periods. It will also allow population levels to be known and so tahr density and population targets set.

NZDA supports the Tahr App.

We would like to see it promoted more and the importance of data communicated to recreational hunters. NZDA is happy to promote the Tahr App to its membership, in partnership with DOC.

NZDA submits that DOC may need to hand over the monitoring and branding of the Tahr

App to GAC. NZDA suggests that DOC seeks to get a public endorsement of the Tahr App by NZDA, SCI, Tahr Foundation and GAC. And these organisations need to have their logos on the information and promotion of the Tahr App.

The advertising of the App and all flyers have DOC's logo and talks too much about conservation and is not appealing to hunters. The targeting and marketing has been a failure and needs to change.

Making changes would be a positive step for DOC to rebuild the trust of hunters and hunting organisations. It will then allow DOC to receive hunter data.

One submitter each year could win a chosen tahr block and period as a prize for using the App – akin to a 'Governor's tag in USA'. It means the hunter gets something in return for their input and effort.

NZDA has been at several meetings where DOC staff have said the App is not working. The App will work, if DOC takes the right approach, as suggested above.

NZDA requests DOC undertakes a survey to ascertain the 2020/21 recreational hunter use of the conservation estate for tahr hunting. In the meantime, refer to NZDA's survey as an indicative guide. This information is lacking but is highly relevant to tahr management and framing Official Control decisions because it is critical to understand the impact recreational hunters have on the tahr herd.

For the 2020/21 operational plan, DOC should factor in the NZDA supplied recreational hunter tahr kill information, in the absence of better data.

Therefore, NZDA submits:

- *that DOC undertake detailed vegetation and population studies this year.*

12 LINZ LAND

Overview: **Submitters that commented on this subject said that accurate tahr population information on land managed by LINZ was essential. Professional guides noted that control operations on these lands could compound the effects of tahr population reductions on Public Conservation Land. One submitter indicated that the possibility that current work could lead to control on these lands was affecting the level of concern about control on Public Conservation Land.**

NZPHGA (4)

To compound our fears we see the Minister and the Department looking at tahr populations on pastoral lease and private land. It's difficult for us to be relaxed about aggressive control operations on Conservation Land when we see the Minister and the Department eyeing tahr on other land tenures. The result of a marked reduction in trophy bull and breeding populations on pastoral lease and private land will see increased hunter competition for a severely diminished trophy bull resource on Conservation Land.

GAC (5)

The Council notes that work is progressing to guide future achievement of HTCP densities on land of other tenures, but control activity on those lands is not part of the Operational Plan.

NZCA (6)

25. The NZCA supports the priority to establish the status of tahr populations off public conservation land.

26. The populations of tahr on private and pastoral lease land is currently unknown. It will be critical to the ongoing control of tahr, for the Department to understand these population densities and trends.

LINZ (11)

We also recognise there is a significant amount of Crown pastoral lease land within the management units, often adjoining public conservation land.

Crown pastoral leaseholders are responsible for managing weeds and pests on their lease. Section 99(b) of the Land Act 1948 specifies that leaseholders must keep the land free from wild animals, rabbits, and other vermin, and generally comply with the provisions of the Biosecurity Act 1993.

This has been a long-standing requirement of pastoral lessees and the approach to managing wild animal numbers is not new. the Land Settlement Board's 1984 High Country Policy notes a determination to ensure the adverse effects of wild animals on the high country will be kept to a minimum and requires active steps to be taken to reduce numbers where the level of animals is considered too high.

Tahr are prized by trophy hunters and relied on for both commercial and recreational hunting. This includes on Crown pastoral lease land, where there are a number of recreation permits held for commercial safari hunting operations.

LINZ will be considering its approach to tahr control in consultation with the Pastoral Lessee's and the Department. In particular, LINZ will take into account leaseholders' compliance responsibilities

under the terms of their lease, and LINZ's commitment to being an active manager and long-term steward of the Crown pastoral estate.