



# Public Consultation of Sambar Deer Management in the Horowhenua, Manawatu, Rangitikei and Wanganui Area

JULY 2005



Department of Conservation  
*Te Papa Atawhai*

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*Sambar stag.  
Photo: DOC*

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## OVERVIEW

The hunting of sambar deer in the Horowhenua/Manawatu/Rangitikei/Wanganui area is tightly controlled through legislation. This legislation dictates, among other things, when and where animals can be hunted and how many animals can be taken.

Over recent years there have been increased calls for this legislation to be either modified to allow greater flexibility in hunting sambar deer or to be removed completely to bring it in line with other deer species hunted throughout the country.

In response to this, the Department has developed this public discussion document on the management of sambar deer to assist it in determining the future control and management of sambar deer in the Horowhenua/Manawatu/Rangitikei/Wanganui area.

The Department of Conservation's interest in the management of sambar deer, as with all other deer species, is to prevent damage to indigenous plants and ecosystems.

The Department of Conservation would welcome your comments on this issue. A submission form is included with this discussion document. The closing date for submissions is the 7th October 2005.

## 1 BACKGROUND

Sambar deer were introduced to the Manawatu/Rangitikei area in 1875 (Douglas 1990), they were given protection in 1888 with limited licensed hunting introduced in 1906. All protection was removed in 1930.

In the mid - late 1970s the New Zealand Deerstalkers Association (NZDA), concerned about the diminishing availability of sambar as a consequence of intensive hunting for the venison market, surveyed the extent of the herd and lobbied the New Zealand Forest Service (NZFS) for some protection of the herd. Around 1980 the NZFS introduced a ban/moratorium on the taking of sambar from the State Forests in the area (Harakeke, Santoft, Tangimoana and Waitarere). This moratorium proved unenforceable as it was not possible to prove that a sambar carcass in the possession of a person had been taken from the moratorium area. Consequently, in 1981, a prohibition on hunting sambar in the Wanganui, Rangitikei, Manawatu and Horowhenua counties was imposed under S.8(3) of the Wild Animal Control Act. Again this prohibition proved unenforceable (for the same reasons) and in 1982, the prohibition was extended to the entire North Island.

In 1987 the Department of Conservation came into existence and inherited the responsibility for the Wild Animal Control Act.

In 1987 - 1988 there was lobbying by landowners/land managers and some sections of the hunting fraternity for the reintroduction of hunting. Landowners sought a reduction in sambar deer impacts while hunters sought access to a recreational resource.

A working group of Department of Conservation (DOC) staff, hunter representatives, farmer & forestry reps and Forest and Bird developed a proposal for the reintroduction of limited hunting. The proposal involved the introduction of a licence with restrictive conditions and a limit bag of one animal per hunter per season. The proposal recognised a landowner/land manager prerogative to manage the sambar population on their property by controlling the number of licensed hunters that they would allow to hunt on their property in any season.

The Minister of Conservation approved the proposal subject to the costs of administering the season being recovered from hunters. The Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Area was published in the NZ Gazette on 29 September 1988 (see Appendix 1).

The first season occurred in October 1988 with the limited hunting opportunities available on public land (including the ex State Forest areas) allocated by public ballot. Private land hunting opportunities were allocated as the landowner saw fit. That situation has continued annually until the present day.

Since 1988 there have been some significant changes, particularly to aspects of land management, ownership and control. As a result there have been increased calls for the Department to take action to address damage attributable to sambar, particularly in pine plantations. In 2004, this culminated in the Department, the Sambar Deer Management Foundation (SDMF) and Ernslaw One Ltd (forestry company) seeking a one-off amendment to the hunting

regulations from the Minister of Conservation to address the problem of sambar damage in Santoft Forest. This amendment temporarily suspended the controls on hunting sambar in Santoft Forest allowing the forestry company to undertake additional control of sambar deer during a two month period following the normal hunting season. Control was undertaken by recreational hunters, with the process being managed by the SDMF.

About 300 licences, on average, are sold each year with about half of those licences for hunters who have been successful in the public ballot. Requests for ballots are received from throughout the country, and even internationally. The season is limited to six consecutive weekends. It is estimated that around 60% of the hunters who have been successful in the public ballot are from outside the local area.

Sambar habitat includes very little land managed by the Department of Conservation with only the Moutoa Conservation Area, Round Bush Scenic Reserve, Whitiāu Scientific Reserve and Whitiāu Scenic Reserve included in the ballots of hunting on public land (Pukepūke Lagoon Conservation Area and Tawhirihoē Scientific Reserve have in the past been attached to ballot blocks).

The advisory group established in 1987/88 has evolved into the Sambar Deer Management Foundation Inc. (SDMF) with most of its membership now being from the hunting fraternity. Since 1996 the Department has contracted the SDMF to manage the hunting season (ballot, licences, report to hunters etc.) and to provide advice on the management of sambar.

The SDMF has recommended some changes to the hunting licence provisions and in the past has suggested that sambar should be transferred from schedule 6 (the noxious animals schedule) to schedule 1 (the game schedule) of the Wildlife Act 1953. This would see the management of sambar moved to the Fish and Game Council. DOC's Policy Statement on Deer Control does not support this option.

There have also been calls from some landowners/managers that all restrictions on the hunting of sambar be removed due to the economic impacts associated with sambar on their properties.

## 2 DOC DEER POLICY AND IMPLICATIONS FOR SAMBAR DEER

In February 2001 the Department of Conservation released its Policy Statement on Deer Control (DOC 2001). This policy, which is consistent with the Department's Conservation General Policy, sets out the approach the Department will take to deer control. Future management of the sambar deer herd cannot be contrary to this policy. The policy makes a number of statements that may have an influence on how sambar can be managed in the future. In the view of some, the current regime of sambar deer management is inappropriate when considered against this policy statement.

*The Department will take a targeted control approach, which is designed to achieve clearly stated outcomes for the protection of indigenous plants and ecosystems.*

*Unlike the Department's national possum and goat plans, this policy statement does not prescribe areas where deer will be controlled over the next ten years. Priorities for deer control will be assessed using a decision support system that is being developed by the Department, which will allow control of deer, possums, goats and other threats to be better integrated.*

*The proposed approach will not affect management of deer on private and Maori land, except for control of new and isolated populations and regulation of deer farming. The Department will retain the ability to use powers under the Wild Animal Control Act to enter onto land to control deer causing damage to native flora and fauna.*

*This policy statement applies primarily to deer control on public conservation lands but also includes actions to restrict the feral range of deer, which will occur across all lands.*

*The department will continue to encourage both commercial and recreational hunting on public conservation lands where this is consistent with management for conservation. Commercial and recreational hunters will generally have open access to public conservation lands.*

*Deer control will be undertaken where this is the most cost-effective way to achieve priority outcomes for places or values managed by the Department. Priority outcomes will be determined using a range of tools. The Department is currently developing improved and integrated decision-support systems that will contribute to the setting of outcomes, identification of priorities, and identification of cost-effective mechanisms.*

*The department currently regulates recreational hunting by issuing hunting permits. Recreational hunters have open access to almost all public conservation lands with few restrictions on what deer they can kill and when they can kill them. Some restrictions do exist, however, for popular herds such as Fiordland wapiti and Blue Mountains fallow, where systems of ballots and bag limits are in place.*

*The Department will continue to encourage recreational hunting where this does not affect the management of public conservation lands for conservation. The Department will not set up areas to be managed for recreational hunting and will not seek to devolve the issuing of hunting permits to a hunter organisation.*

*The Department will streamline the existing hunting permit system and where appropriate move to longer-term area wide permits. In the longer-term, the Department will explore the option of removing the requirement for written hunting permits for deer entirely. This would require legislative change.*

*The status and management of existing recreational hunting areas will be reviewed as and when necessary in order to facilitate deer control to protect conservation values, as provided for in Part III of the Wild Animal Control Act."*

In essence, these statements mean that where sambar deer are placing indigenous plants and ecosystems managed by the Department, at risk, they will be targeted for control. Additionally the Department will consider taking targeted control to prevent the spread of sambar deer into new areas. The Department would not look to be involved in managing deer on private land unless they involved either of the two scenarios above.

The deer policy also implies that the Department will not seek to set up a new area to be managed for the recreational hunting of sambar deer if the current gazette notices are repealed. Nor would it devolve the issuing of hunting permits for DOC-managed lands to a hunter organisation if they set up a recreational hunting area on private lands or public lands not managed by DOC. If the gazette notices were repealed, the deer policy implies that recreational hunters would have open access to lands managed by the Department to hunt sambar deer (although some restrictions may be placed on the number of hunters allowed in an area at any one time for safety reasons).

### 3 INFORMATION ON RANGE AND RANGE USE OF SAMBAR

The Horowhenua/Manawatu/Rangitikei/Wanganui sambar herd is one of two discrete feral herds of sambar deer in New Zealand (the other located near Rotorua). The Horowhenua/Manawatu/Rangitikei/Wanganui herd is scattered along the whole coastal belt from Levin to Wanganui, and inland along the Turakina, Whangaehu and Rangitikei river valleys.

Sambar deer occupy a variety of habitats. At the time of liberation, much of lowland Manawatu consisted of swamp, low scrub-clad ridges, and remnant indigenous forest, rich in food and cover. With progressive development of land for agriculture, sambar became restricted to remaining undeveloped areas, from which they foraged onto farmland. The extension of pine plantations along the coast and on adjacent farmland from the early 1940s has provided cover but little food during summer when plantations are dry. Sambar deer therefore spend much of the summer feeding on farmland and lying-up in small areas of remnant cover and shelterbelts, returning to the pine forests in winter. The inland foothills of the Turakina/Whangaehu catchments still support remnant patches of indigenous forest and shrubs, particularly within steep gullies, which provide sufficient cover adjacent to pasture and croplands. (Douglas1990).

In the coastal Manawatu, sambar deer feed mainly on grasses (65% of total diet), plus flax and pine needles and bark (10%: Stafford 1997). Sambar in Moutoa Conservation Area feed almost exclusively on graminoids, principally flax and floating sweetgrass (Kelton and Skipworth 1987). Sambar living within pine forests graze on various introduced grasses and browse the emerging shoots of briar (*Rosa canina*), blackberry (*Rubus fruticosus*) and buds of young pines. In spring and autumn the bark of coniferous trees is sometimes torn off and eaten. James (1999) observed a gut sample from a sambar stag as containing 30% of the growing tips of pine, 30% strips of pine bark (2.5 c.m. wide by up to half a metre in length), with the rest being a combination of pine needles,

rough grasses and some yellow lupin. Improved pasture, maize and root crops such as swedes and chou moellier are also frequently included in their diet (Douglas 1990).

#### 4 CONSERVATION IMPACTS

Little is known about the conservation impacts of sambar deer. Deer damage to indigenous vegetation is predominately done by browsing and can affect conservation values by preventing regeneration of favoured plant species, which causes significant changes to the structure and composition of native ecosystems. At critical sites, non-replacement of canopy species can lead to canopy collapse (DOC 2001). No formal monitoring of sambar impacts has been undertaken within the DOC managed reserves included in the gazetted area because of the small size of the DOC areas involved, the low numbers of animals taken from these areas (see Appendix 2) and because informal monitoring has not indicated any significant impacts. Observations by DOC staff monitoring the impacts of other browsers in these reserves indicate that sambar deer are not having a significant impact at their current population levels. Seedling exclosure cages established to monitor possum impacts in Himatangi Scientific Reserve showed seedlings densities to be about equal inside and outside the possum cages (these cages would also exclude sambar deer). The amount of regeneration at a site appeared to be controlled by light availability and/or availability of raised areas (the ground can be waterlogged in winter) rather than by browse. Only insect browse was observed on any of the understory plants.

In monitoring conducted in Round Bush during 2004, two cases of browse were observed low on mahoe and appeared to be ungulate (sambar deer) browse rather than possum damage. However, the browse was quite old in one case and the understorey vegetation was quite dense and included supplejack, *Asplenium* ferns and various *Coprosma* species, which are all palatable to ungulates. Seedlings of pukatea, titoki, kahikatea and mahoe were common at a range of height classes. Deer do not seem to be affecting the forest understorey composition or structure at their current levels in these forest reserves.

Some damage has been reported within private indigenous reserves in the Turakina Valley. In particular tree fuchsia, broadleaf, mahoe and *Coprosma grandifolia*. It is suspected that this is being caused by only one animal (J Marsh pers. comm.). Other landowners also report damage to protected native bush on private land.

Sambar deer range has been increasing slowly, particularly to the north and east, largely as a result of natural dispersal. In some instances sambar will be moving into areas already occupied by other deer species. The spread of deer into new areas poses a biosecurity risk as it adds to the threats to conservation values in those areas. No Bovine Tb has been found in the sambar herd despite repeated sampling by MAF.

## 5 CONSERVATION BENEFITS

Sambar deer are not internationally listed as either endangered or at risk by the IUCN Red Data Book. The Manawatu herd is derived from a single pair imported from Sri Lanka. No other bloodlines have been released into this herd, unlike the Rotorua herd, which contains sambar/rusa hybrids. For this reason the SDMF see this herd as having a unique value, being the only pure sambar herd in the southern hemisphere and therefore worth conserving. There is a very high recreational interest in this herd. It is argued by some that this is a result of the hunting regime currently in practice and that some areas (i.e. some DOC reserves) would not be as intensely hunted if the restrictions were totally removed. Conversely, others argue that the restrictions have resulted in a stag only mentality in the majority of hunters and that more animals would be taken if the restrictions were modified or abandoned.

## 6 ECONOMIC IMPACTS

Sambar deer have been known to have an impact on agricultural/horticultural crops. Maize and root crops such as swedes and chou moellier are frequently included in their diet, and there have been reports in the past of sambar damaging potato and asparagus crops. Sambar deer also consume pasture grass that would otherwise be available for stock. They have been reported damaging fences and conservation plantings of poplars. It is unknown how widespread these affects are, the volumes consumed or what the economic implications of this damage is.

Sambar (along with other species such as red deer and cattle), have also been reported damaging commercial plantations of pine trees (*Pinus radiata*). The damage is caused by bark stripping which affects the growth, form and quality of the trees, as well as opening up the trees to secondary infection from diseases such as *Diplodia pinea* (a fungus which can potentially reduce growth, deform trees, and ultimately kill them). Damage from bark stripping causes a downgrade in the value of the affected log.

The New Zealand Forest Service (NZFS 1965) reported sambar damage to pine trees (planted 1955) in what was then Waitarere State Forest. Sample counts on one acre lots gave an average of 65% damaged stems per acre. The bulk of the damage occurred immediately after pruning to six feet. Sambar damage was also reported following pruning in the Marton Sash and Door Tree Farm. In this instance 70% of the trees were damaged. Rayonier (forestry company), who now manage Waitarere Forest, estimate the economic loss due to deer damage to be 29.25% (S Middlemass pers. comm.). Sambar deer damage has meant that the company no longer prunes (with the exception of roadsides) in this forest. This has other economic effects such as a loss of employment opportunities, as a non-pruned regime is a lot less labour intensive.

In February 2002 a survey was done over a range of stands in Santoft Forest (1991-1996 age class) by Ernslaw One Ltd. A total of 1,198 trees were assessed. Thirty three percent (33%) of the total trees surveyed had been damaged, at some level of severity. Nearly 20% of pruned trees surveyed were found to be

heavily damaged. To follow on from the survey, a series of monitoring plots were established in Santoft Forest in February 2003 for the purpose of determining levels of bark stripping occurring in young pine plantations (1996 - 1997 age class). In the 1996 age class 58% of the trees had moderate to severe levels of damage. In 2004 this had risen to 74% in some areas (Herrick 2004a & b). Based on monitoring work, it is estimated that the potential economic loss will be up to 38% or an estimated 3.5 million dollars per annum, if damage continues at current levels (G Herrick pers. comm.). Ernslaw One Ltd also runs a non-pruned regime in Santoft Forest due to sambar deer damage, resulting in fewer employment opportunities.

In 2004 a research project was carried out by Massey University to quantify the number of sambar deer using two different compartments, and the incidence and severity of bark stripping damage to *Pinus radiata* in Santoft Forest.

An eight-year-old compartment with a high frequency of bark stripping damage and a five year old compartment with minimal damage were compared. The eight year old compartment had much higher numbers of deer compared to the younger compartment.

The proportion of trees in the eight year old compartment suffering bark damage was 72%, which included 21% fresh damage from winter 2004. The five year old compartment had 8% total damage and 1% fresh damage. Only trees with previous damage had fresh damage, meaning that the percentage of damaged trees did not increase during winter 2004. Stripping occurred on both pruned and unpruned trees

Bark nutrition was analysed, showing that bark from stripped trees had a metabolisable energy (ME) content of 9.5 MJ ME/kg DM and unstripped trees a ME of 8 MJ ME/kg DM, which is comparable to leafy pasture silage and stalky pasture hay, respectively. The bark of stripped and unstripped trees had very high condensed tannins content (22%), making it unpalatable to most animals such as sheep and cattle; however sambar deer are not affected by high tannin content.

The depth of bark was measured on trees that had been freshly stripped and the nearest unstripped tree. The damaged trees had significantly thinner bark compared to that of unstripped trees. This suggests that it may be possible to reduce the incidence of damage if genotypes with increased bark thickness or more fibrous bark can be identified (Leigh Christensen pers. comm.)

Sambar also impact on farm forestry ventures. Landowners report sambar damaging tree blocks (both pine and cypress), severely lowering the grading of pruned trees or, in some instances, damaging them enough to kill them.

Sambar deer have also been implicated in a number of vehicle accidents. To date these have not resulted in any loss of human life, but in at least one case the driver of a vehicle received significant injuries and was hospitalised. Collisions with sambar have resulted in a number of vehicles being written off.

## 7 ECONOMIC BENEFITS

As part of the licence return, the SDMF collects information from hunters on the money they spend in association with their hunting trips. Over the last eight years, hunters estimate that they have spent on average around \$59,000 per annum in relation to their sambar hunting. The SDMF believes that this is an under estimate because only 71% of the licence holders, on average, put in a return. Of those that do, many do not put down what their costs are. Some only put down the \$20 for the licence, whilst others say that hunting is a pleasure and don't want to put a value on it. The SDMF estimates that a more realistic figure would be two to three times that recorded.

A number of commercial operators, both local and national, advertise sambar deer hunts in New Zealand. Whilst some are targeting the Rotorua herd or safari operations within the North Island, a few offer opportunities to hunt the Horowhenua/Manawatu/Rangitikei/Wanganui herd. Free range hunting is offered on private land within season, with one operator charging up to US\$ 3500 per animal. It is unknown how widespread this practice is or what the economic benefits are to the local economy in terms of employment and revenue.

## 8 AREA GAZETTED AS SPECIFIED RECREATIONAL HUNTING AREA

Currently, sambar deer in the Horowhenua/Manawatu/Rangitikei/Wanganui area may be hunted only in the specified recreational hunting area as described in the New Zealand Gazette (Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Area; notice No. 164, 29 September 1988, pg 3853 - see Appendix 1 for a description of the gazetted area). Figure 1 outlines this area. There are no restrictions on the hunting of Sambar deer in the Rotorua area or for sambar deer in the Horowhenua/Manawatu/Rangitikei/Wanganui area outside of this gazetted area (other than landowner permission).

FIGURE 1: GAZETTED RECREATIONAL HUNTING AREA FOR SAMBAR DEER IN THE HOROWHENUA, MANAWATU, RANGITIKEI AND WANGANUI AREA



## 9 CURRENT SEASON CONDITIONS

Current hunting of sambar deer within the Horowhenua/Manawatu/Rangitikei/Wanganui recreational hunting area is in accordance with conditions outlined in the 1988 and 1990 gazette notices (“Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Area” and “Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Areas Notice 1988, Amendment No.1” – See Appendix 1 for full details of these notices). In essence, the conditions require:

- All hunters to hold a firearms licence (except in the case of bow hunters)
- The hunting season will run over six consecutive weekends beginning with the third calendar weekend in August
- A licence is required – the licence will contain information relevant to the hunting of sambar
- Licence holders must have the landowner’s permission to hunt the land
- Licences are not transferable
- Only one sambar deer per hunter may be taken during the entire season
- The use of dogs, vehicles, aircraft, artificial lights or beaters is prohibited
- Only approved calibre firearms can be used
- Only approved hunting bows and equipment can be used
- Shooting on approved days can occur only between the hours of 6am to 6:30pm
- Game tags must be attached to the sambar immediately they are secured
- All hunters must file hunting returns as outlined on the licence
- The sale of sambar deer and their by-products is prohibited
- Successful hunters must check their bag through an official monitoring point
- Wounded deer must be located and dispatched humanely – those that cannot be located must be reported to a monitoring point as soon as possible

## 10 RECENT HISTORY OF HUNTING

One of the requirements of the sambar hunting licence is that all licence holders must return completed hunting data to the SDMF. This information for the last eight years is shown in Appendix 2 and is summarised below.

- The number of licences issued to hunt sambar deer has increased over time
- Hunters have a 10% chance of winning a ballot
- Hunting permit returns have decreased over the time
- Significantly more stags are killed each year than hinds
- In most years, significantly more sambar are killed on private blocks than on balloted blocks
- The number of sambar killed per hour hunted has not changed over the last eight years
- Significantly more hinds are seen each year than stags

- The number of animals seen per hour hunted has not significantly changed over the last eight years
- Kills within the balloted blocks have remained fairly constant, except for Santoft Forest, where deer numbers have dramatically increased (numbers trebling in the last four years - see Appendix 2)

## 11 SDMF REQUEST FOR A CHANGE IN THE WAY SAMBAR DEER ARE MANAGED

The SDMF believes that times have changed since the establishment of the original moratorium and that now is the time for changes to allow for better management of the sambar herd and associated problems. To this end the SDMF approached DOC to discuss the possibility of changing the gazette notice.

The SDMF believe that the herd should continue to be managed in a way that is compatible with the wishes of landowners, hunters, conservationists and the public generally. To achieve this, they believe that more flexible management regimes need to be applied so that there is greater freedom to address issues and problems that arise, such as those discussed above.

The currently gazetted conditions are very restrictive and difficult to modify on a case-by-case basis. This was highlighted in 2004 when the Department, the SDMF and Ernslaw One Ltd looked at addressing the localised issue of increasing sambar deer damage in Santoft Forest. Resolving the issue required a lengthy bureaucratic process (due to the legislative requirements of the current gazette notice) and ultimately ministerial approval to undertake any action. Under current legislation this process would need to be followed for any further issues that can not be accommodated during the current hunting season, no matter how small.

The SDMF have therefore suggested that the current gazetted conditions be modified to permit the Department to take a more flexible approach to setting the season length and “bag limit” and to make provision for adjusting these aspects over specific parts of the specified recreational hunting area. They have suggested these changes to provide for localised control of sambar deer damage or to enable the population structure to be modified. The SDMF believe that in certain areas, at certain times, more animals should be taken than the current season allows for. They believe that lengthening the season or changing the bag limit per hunter would give landowners more flexibility to use recreational hunting to manage deer on their properties.

## 12 LANDOWNERS/MANAGERS REQUEST FOR A CHANGE IN THE WAY SAMBAR DEER ARE MANAGED

Some landowners/managers have requested that the hunting restrictions that currently apply to sambar deer be totally removed. They feel that the current hunting restrictions are an impediment to their farming or forestry businesses and that they should be able to manage the animals on their properties as they

see fit. They believe that total removal of the hunting restrictions would allow them to target control more effectively.

### 13 THE CONSULTATION PROCESS

The request by the SDMF, along with requests from some landowners/managers to have the current restrictions on hunting sambar deer removed, have generated this public consultation process.

The Wild Animal Control Act is silent on any requirement for public consultation but the Minister of Conservation cannot impose a management plan or proposal on landowners/land managers without consulting them. This obligation also applies if the Minister wishes to change the current conditions specified by the existing gazette notice.

To meet the requests for public consultation while also meeting the Minister's legal obligations to landowners/land managers, a two-stage process is planned.

The first stage involves seeking public comment on issues and options with respect to the existing and future control and management of sambar deer in the Horowhenua/Manawatu/Rangitikei/Wanganui area and using that public comment to develop a proposal or plan to modify the existing hunting conditions.

The Minister of Conservation would then consult with landowners/land managers with respect to that proposal or plan and as a result of that consultation either implement or modify the plan.

### 14 ISSUES FOR PUBLIC COMMENT

The original intent of the season was that landowners would have (within the constraints of the season provisions) direct control over the number and type of sambar harvested from their properties.

However, several landowners and managers have suggested that the current hunting restrictions are an impediment to their farming or forestry businesses. They suggest that all restrictions on the hunting of sambar be removed and that they are allowed to manage the animals on their properties as and when they require and to levels that they deem appropriate.

The SDMF believe that these issues can be addressed by modifying rather than removing the current restrictions associated with managing sambar deer in the Horowhenua/Manawatu/Rangitikei/Wanganui area. There is a high recreational interest in this herd. The SDMF believe that modifying the conditions could see this interest better harnessed and effectively used to address the issues raised to the benefit of all.

There are no clear conservation benefits from either view. Removal of the restriction would result in less administration requirements from the department.

Your views on this issue would assist the Department of Conservation in planning for the future management of sambar deer. A submission form is included with this discussion document. The closing date for submissions is the 7th October 2005.

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## APPENDIX 1: 1988 AND 1990 GAZETTE NOTICES PERTAINING TO SAMBAR DEER HUNTING.

### ***Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Areas***

Pursuant to section 8 (4) of the Wild Animal Control Act 1977, the Minister of Conservation hereby declares that, for the purpose of recreational hunting, Sambar deer (*Cervus unicolor*) may be hunted in the specified area described in the Schedule hereto, subject to the conditions which apply to the specified area. This notice applies from 1 October 1988.

#### Conditions Applying to Specified Area

1. All persons wishing to hunt or kill Sambar deer must hold a current firearms licence and must provide the licence number when applying for a hunting licence except that bow hunters need only provide proof of identity.
2. The hunting season for Sambar deer in 1988 shall comprise the 5 consecutive weekends commencing on 8 October 1988, that is 8-9, 15-16, 22-23, 29-30 October, and 5-6 November 1988.  
Each year thereafter the season shall be for 6 consecutive weekends beginning with the third calendar weekend in August.
3. The hunting or killing of Sambar deer within the specified area may only be authorised by a licence issued by the Director-General of Conservation.
4. Applicants for licences must nominate the property on which they have permission to hunt and provide the name of the occupier.
5. Licences shall be valid only when countersigned by the land owner or occupier for those properties nominated. If permission to hunt on other properties is obtained, licence holders must have their licences countersigned in advance of hunting.
6. Licences are not transferable between individual hunters.
7. A limit of one Sambar deer per hunter may be taken during the entire hunting season.
8. The use of a dog, vehicle, vessel, aircraft, artificial light or beater while hunting Sambar deer is prohibited.
9. No person shall hunt Sambar deer with a firearm of a calibre smaller than 6.5 mm (.264"), with a cartridge case less than 51 mm (2.008") in length and with a projectile weight less than 130 grains. The use of smooth bore weapons and black powder propellant is prohibited. A list of approved cartridge types will be available at all Department of Conservation offices within the specified area.
10. Bow hunters must use a hunting bow with a minimum peak draw weight of 22.5 kilograms and broad head arrows comprising no less than 2 cutting edges. The arrow head shall be unbarbed and the distance between opposing cutting edges at the widest part shall not be less than 25 mm (1"). The use of arrows with any poison, explosive, or other chemical substance on, or in, the head or shaft is prohibited.

11. Shooting is allowed only on specified days which shall be noted on the licence and during the hours from 6 a.m. to 6.30 p.m. inclusive.
12. Game tags must be attached to the Sambar immediately they are secured. Unused tags must be returned with licence returns at the end of the hunting season.
13. The sale of Sambar deer or their by-products is prohibited.
14. All successful hunters must check their bag through a monitoring point specified in the licence and provide autopsy and other data as required in the licence. A full list of monitoring points and the roster for their staffing will be attached to all licences on issue.
15. Any wounded deer must be located and dispatched humanely. Wounded deer which cannot be located by the hunter must be reported to the monitoring point as soon as possible.
16. The licence shall include the following matters:
  - (a) The times and the rights of the holder to enter, remain on, and use the specified area or part thereof, except that nothing in any licence shall entitle the holder to enter upon any land without the consent of the occupier.
  - (b) Conditions as to the methods of taking Sambar deer, and the number, type and sex of Sambar deer that may be taken by any licence holder.
  - (c) The period or conditions under which it remains valid, but shall also provide that it may be revoked at any time at the discretion of the Director-General of Conservation.
  - (d) The fee paid by the licensee is a condition of the grant of the licence.
17. No person shall act in contravention of any authorisation or condition stated upon a licence to hunt in the specified area or other lawful direction issued by the Director-General of Conservation in respect to wild animal control within the specified area.

This notice replaces and revokes the notice dated 23 December 1986 concerning Sambar deer which was published in the New Zealand Gazette, 15 January 1987, page 28.

#### Schedule

All that land contained within a boundary described by the true right bank of the Otaki River from its mouth to the S.H. 1. bridge then along S.H. 1 to the junction of S.H. 1 and S.H. 57; then along S.H.57 to its junction with S.H.3 then along S.H.3 to Sanson then along S.H. 1 to the Rangitikei River; then along the true left bank of the Rangitikei River to the junction of the Rangitikei and Hautapu Rivers; then along the true left bank of the Hautapu River to where S.H. 1 crosses the river; from this point along a straight line to the junction of the Waitotara River and the Makakaho Stream; from this point along the true left bank of the Waitotara River to its mouth then south along the coastline to the Otaki River mouth.

Dated at Wellington this 21st day of September 1988.

HELEN CLARK, Minister of Conservation.

***The Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Areas Notice 1988. Amendment No.1***

Pursuant to section 8 (4) of the Wild Animal Control Act 1977, I, Philip Tosswill Edmond Woollaston, Minister of Conservation, hereby amend the "Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Areas Notice 1988", New Zealand Gazette, No. 164 of Thursday, 29 September 1988, pages 3852-3853.

1. Title and commencement:

(1) This amending notice may be cited as the Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Areas Amendment No.1, and shall be read together with and deemed part of the Notification of Specified Area for Recreational Hunting of Sambar Deer in Manawatu and Wanganui Areas Notice 1988 (hereinafter referred to as the "principle notice").

(2) This notice shall come into force on the 18th day of August 1990.

2. The principle notice is hereby amended by repealing clause 9 and substituting the following clause:

"9. No person shall hunt Sambar deer with a firearm of a calibre smaller than 6.5 mm (.264"), with a cartridge case less than 51 mm (2.008") in length and with a projectile weight less than 130 grains. Where black powder propellant is used the projectile must not weigh less than 300 grains and at least 90 grains of powder must be used to give a minimum muzzle energy of 1500 foot pounds. The use of smooth bore weapons is prohibited. A list of approved cartridge types will be available at all Department of Conservation offices within the specified area."

3. The principle notice is hereby further amended by inserting after clause 12 the following clause:

"12a. All licence holders must return completed data, as requested in the licence, within 1 calendar month after the end of the hunting season."

Dated at Wellington this 18th day of July 1990.

PHILIP WOOLLASTON, Minister of Conservation.

**APPENDIX 2: HUNTING DATA FOR SAMBAR  
DEER IN THE HOROWHENUA, MANAWATU,  
RANGITIKEI AND WANGANUI AREA**

YEAR	NO. OF BALLOTTED BLOCKS	NO. OF APPLICATIONS FOR BALLOT BLOCKS	LICENCES ISSUED (TOTAL)	LICENCES ISSUED (BALLOT)	LICENCES ISSUED (PRIVATE)	% PERMIT RETURNS
2004	210	1205	515	342	173	67
2003	76	1109	365	117	248	70
2002	138	1171	393	212	181	60
2001	120	959	317	150	167	65
2000	126	1068	281	153	128	67
1999	120	989	266	120	146	73
1998	111	914	281	111	170	69
1997	111	910	273	111	162	80.5
1996	105	915	237	105	132	89

YEAR	SAMBAR KILLED (TOTAL)	HINDS KILLED	STAGS KILLED	SEX NOT RECORDED KILLS	NO. SAMBAR KILLED BALLOT BLOCKS	NO. SAMBAR KILLED PRIVATE BLOCKS	KILLS PER HOUR HUNTED
2004	77	45	32	0	52	25	0.012
2003	71	26	31	14	7	64	0.013
2002	47	12	35	0	27	20	0.012
2001	49	18	30	0	20	29	0.014
2000	37	11	26	0	15	22	0.012
1999	39	16	23	0	16	23	0.011
1998	43	11	32	0	10	33	0.013
1997	36	10	19	7	13	23	0.011
1996	44	13	24	7	11	33	0.013

YEAR	SAMBAR SEEN (TOTAL)	YOUNG SEEN	STAGS SEEN	HINDS SEEN	ANIMALS SEEN PER HOUR HUNTED
2004	1101	245	237	619	0.171
2003	786	196	167	423	0.140
2002	607	153	113	341	0.149
2001	530	118	128	284	0.147
2000	573	119	114	304	0.180
1999	751	198	143	410	0.219
1998	540	131	137	272	0.159
1997	469				0.148
1996	752				0.224

YEAR	HOURS HUNTED (TOTAL)	HOURS RESEARCHED (TOTAL)
2004	6433	1481
2003	5619	1515
2002	4086	1469
2001	3604	1264
2000	3177	1153
1999	3425	1061
1998	3402	1250
1997	3171	995
1996	3355	1339

YEAR	SAMBAR KILLS PER BALLOT BLOCK						
	Waitarere	Moutoa (DOC)	Harakeke	Round Bush (DOC)	Santoft	Tangimoana	Other DOC Reserves
2004	4	5	2	0	35	6	0
2003	4	2	1	0	23*	1*	0
2002	2	4	0	0	18	3	0
2001	1	6	0	0	11	2	0
2000	1	7	0	0	6	1	0
1999	2	9	0	1	3	1	0
1998	2	6	0	0	1	0	0
1997	3	4	2	0	2	2	0
1996	2	6	1	0	1	1	0

\* areas not included in the public ballot of 2003







