Hawai'i Volcanoes National Park



Protecting & Restoring Native Ecosystems by Managing Non-Native Ungulates Plan/EIS

Public Scoping Comment Analysis Report

October 2008

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Introduction and Guide

Introduction

On February 13, 2008 the National Park Service (NPS) published a notice of intent to prepare an environmental impact statement (EIS) in the Federal Register for the Protecting and Restoring Native Ecosystems by Managing Non-Native Ungulates Plan/EIS at Hawai'i Volcanoes National Park (the park). The notice of intent invited the public to submit comments on the scope of the planning process and potential alternatives through May 19, 2008. In conjunction with the publication of the notice of intent, the park also released a newsletter containing a summary of the plan's purpose and need, objectives, and several preliminary management concepts. Additionally, three public meetings were held during the scoping period. The first was held on April 29 at the University of Hawai'i at Hilo, the second on April 30 at the Naalehu Community Center, and the third on May I at the Kona Outdoor Circle Educational Center and Botanical Garden. The meetings included presentations on non- native ungulate issues at the park and on the planning process, a listening session, and open house. Park staff and other NPS specialists were on hand to record public comments, answer questions, and provide additional information to meeting attendees. The NPS received 112 pieces of correspondence during the scoping period, all of which were entered into the NPS's web-based Planning, Environment and Public Comment (PEPC) system, either directly by the commenter or through the uploading of comments that were submitted at the public scoping meetings or in hard-copy form to the park.

Definition of Terms

Several key terms used in this document are defined below.

Correspondence: A correspondence is the entire document received from a commenter. It could be in the form of a letter, written comment form, online comment form, comment recorded at an open house, email, or petition.

Comment: A comment is a portion of the text within a correspondence that addresses a single subject. It could include such information as an expression of support or opposition to the use of a potential management tool, additional data regarding the existing condition of a resource, or an opinion debating the adequacy of an analysis.

Code: Codes are labels that function to categorize comments based on the subject a comment addresses. Codes are used to track comments and group comments with other comments that address common topics and issues.

Concern: Concerns are statements that encapsulate the issues expressed by comments assigned to a particular code. It is common for the content of comments falling under a single code to be described by several different concern statements.

The Comment Analysis Process

Comment analysis is a process used to compile and correlate similar public comments into a format that can be used by decision makers and the Protecting and Restoring Native Ecosystems by Managing Non- Native Ungulates Plan/EIS team. Comment analysis assists the team in organizing, clarifying, and addressing technical information pursuant to National Environmental Policy Act (NEPA) regulations. It also aids in identifying the topics and issues to be evaluated and considered throughout the planning process.

The comment analysis process includes five main components:

- developing a coding structure
- employing a database for comment management
- reading and coding public comments
- interpreting and analyzing the comments to identify issues and themes
- preparing a comment summary

A coding structure was developed to help sort comments into logical groups by topics and issues. The coding structure was derived from an analysis of the range of topics discussed during internal NPS scoping, past planning documents, and the comments themselves. The coding structure was designed to capture all comment content and not to restrict or exclude any ideas.

The NPS PEPC database was used for management of the comments. The database stores the full text of all correspondence and allows each comment to be coded by topic and issue. Some outputs from the database include tallies of the total number of correspondences and comments received, reporting of comments by a particular topic or issue, and demographic information regarding the sources of the comments.

Analysis of the public comments involved the assignment of codes to statements submitted by the public. All comments were read and analyzed, whether they

were of a technical nature, an opinion, a preference of one potential alternative element over another, or a comment of a personal or philosophical nature.

Although the analysis process attempts to capture the full range of public concerns, this public scoping comment analysis report should be used with caution. Comments from people who chose to respond do not necessarily represent the sentiments of the entire public. Furthermore, this was not a vote-counting process, and the emphasis was on the content of the comment rather than the number of times a comment was received.

Guide to this Document

This document contains several reports derived from the comment analysis process. They are described below.

Content Analysis Report – This is the basic report produced by PEPC. It provides information on the numbers and types of comments received, organized by code. The first section of the report provides a summary of the number of comments that were coded under each subject. The second section provides general demographic information, such as states where commenters live, the number of letters received from different categories of organizations, etc.

Public Comment Report – This report lists the substantive comments received during the scoping process. These comments are organized by codes and further organized into concern statements. Below each concern statement are representative quotes, which have been taken directly from the text of the public's comments and further clarify the concern statements.

Comment Index by Organization Type – This list identifies all of the codes that were assigned to each individual piece of correspondence and is arranged by organization type. Individual commenters are also included in this report and are identified as Unaffiliated Individuals.

Content Analysis Report

Comment Distribution by Code

| Code | Description | Number of Comments |
|---------|--|-----------------------|
| ACıoo | Alternative Concepts: New Alternatives or Elements | 17 |
| АС1000 | Alternative Concepts: Eradication of Ungulates | 59 |
| АС10000 | Alternative Concepts: Direct Reduction | 7 |
| АСпооо | Alternative Concepts: Reproductive Control | 3 |
| AC12000 | Alternative Concepts: Combination of Management Approaches | 2 |
| AC13000 | Alternative Concepts: Fencing | 25 |
| AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park | 17 |
| AC15000 | Alternative Concepts: Education and Outreach | 14 |
| AC200 | Alternative Concepts: Support Ungulate Management | 30 |
| AC2000 | Alternative Concepts: Public Hunting (Open Hunt) | 73 |
| AC300 | Alternative Concepts: Oppose Ungulate Management | 2 |
| AC3000 | Alternative Concepts: Professional Hunting | 13 |
| AC4000 | Alternative Concepts: Restoration of Vegetation | 19 |
| AC6000 | Alternative Concepts: Weed Control | 8 |
| AC7000 | Alternative Concepts: Fire Management | 6 |
| AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) | 29 |
| AC9000 | Alternative Concepts: Capture and Relocation | 7 |

| Code | Description | Number of Comments |
|---------|---|-----------------------|
| АЕ10000 | Affected Environment: Rare or Unusual Vegetation | 7 |
| АЕнооо | Affected Environment: Species of Special Concern | 2 |
| AE12000 | Affected Environment: Wildlife and Wildlife Habitat | 25 |
| AE13000 | Affected Environment: Cultural Resources | 2 |
| AE19000 | Affected Environment: Other Agencies' Land Use Plans | 2 |
| AE2000 | Affected Environment: Soils | I |
| AE20000 | Affected Environment: Land Use | 2 |
| AE21000 | Affected Environment: Socioeconomics | 4 |
| AE22000 | Affected Environment: Visitor Use | I |
| AE23000 | Affected Environment: Native Hawaiian | 13 |
| AE24000 | Affected Environment: Water Quality | 3 |
| AE9000 | Affected Environment: Vegetation | 17 |
| CC1000 | Consultation and Coordination: General Comments | 7 |
| CR1000 | Cultural Resources: Guiding Policies, Regs and Laws | I |
| CR2000 | Cultural Resources: Methodology and Assumptions | 3 |
| CR4000 | Cultural Resources: Impact Of Proposal and Alternatives | 6 |
| GA1000 | Impact Analysis: Impact Analyses | 2 |
| МТ1000 | Miscellaneous Topics: General Comments | I2 |
| NH3000 | Native Hawaiian: Impact of Proposal and Alternatives | 7 |
| PN3000 | Purpose and Need: Scope of the Analysis | 5 |

| Code | Description | Number of Comments |
|--------|---|-----------------------|
| PN6000 | Purpose and Need: Land Management Laws, Exec Orders | 3 |
| PN8000 | Purpose and Need: Objectives in Taking Action | 6 |
| РО1000 | Park Operations: Guiding Policies, Regs and Laws | Ю |
| PO3000 | Park Operations: Study Area | I |
| PO4000 | Park Operations: Impact of Proposal and Alternatives | 6 |
| PO5000 | Park Operations: Impacts | I |
| RF1000 | References: General Comments | 2 |
| SE4000 | Socioeconomics: Impact of Proposal and Alternatives | I |
| TE2000 | Threatened and Endangered Species: Methodology and Assumptions | I |
| TE4000 | Threatened and Endangered Species: Impact of Proposal and Alternatives | 2 |
| TE5000 | Threatened and Endangered Species: Cumulative Impacts | 2 |
| VE4000 | Visitor Experience: Impact of Proposal and Alternatives | I |
| VG2000 | Vegetation: Impact of Proposal and Alternative Concepts | 5 |
| VG3000 | Vegetation: Cumulative Impacts | 2 |
| VG5000 | Vegetation: Impact of the Proposal and Alternatives to Weeds and Non- Native Species | 5 |
| VG6ooo | Vegetation: Impact of the Proposal and Alternatives on the Fire Regime | I |
| VNioo | VALUES - Value the natural resources or setting (flora, fauna, views, natural quiet, undeveloped areas) | 3 |
| VU4000 | Visitor Use: Impact of Proposal and Alternatives | I |
| WH1000 | Wildlife and Wildlife Habitat: Guiding Policies, Regs and Laws | I |
| WH2000 | Wildlife and Wildlife Habitat: Methodology and Assumptions | 2 |

| Code | Description | Number of Comments |
|--------|--|-----------------------|
| WH3000 | Wildlife and Wildlife Habitat: Study Area | 2 |
| WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives | п |
| WH5000 | Wildlife and Wildlife Habitat: Cumulative Impacts | 3 |

Correspondence Distribution by Correspondence Type

| Туре | Number of Correspondences |
|----------------------------------|------------------------------|
| Web Form | 36 |
| Public Meeting Flip Chart | 29 |
| Public Meeting Listening Session | 20 |
| Letter | 15 |
| Park Form | IO |
| E- mail | 2 |
| Total | II2 |

Correspondence Signature Count by Organization Type

| Organization Type | Number of Correspondences |
|-------------------------|------------------------------|
| Federal Government | I |
| Non- Governmental | I |
| State Government | 2 |
| Unaffiliated Individual | 108 |
| Total | II2 |

Correspondence Distribution by State

| State | Number of Correspondences |
|-------------|------------------------------|
| Unspecified | I |
| California | I |
| New Jersey | I |
| Arizona | 2 |
| Hawaii | 107 |
| Total | II2 |

Public Comment Report

AC100 - Alternative Concepts: New Alternatives or Elements

Concern ID: 17680

CONCERN Commenters suggested new alternative elements for the plan/EIS including

STATEMENT: using food plots to lure animals; rounding up and herding ungulates,

including mouflon; raising goats for food; turning ungulate management into a business activity and using the funds to help NPS operations; various options for a hunting program such as access fees, volunteer options, and

permits; and implementing a hunting access program.

Representative Quote(s):

Corr. ID: 8 Organization: Not Specified

Comment ID: 74766 Organization Type: Unaffiliated Individual Representative Quote: NPS should round up the mouflon and herd them;

goats carry seeds of plants like Koa.

Corr. ID: 8 Organization: Not Specified

Comment ID: 74768 Organization Type: Unaffiliated Individual Representative Quote: Keep goats out of pig areas, and feed them after

capturing them. Raise them for food.

Corr. ID: 35 Organization: C&S Outfitters

Comment ID: 74740 Organization Type: Unaffiliated Individual Representative Quote: Also what about food plots to lure the animals

away from the forest?

Corr. ID: 67 Organization: National Wild Turkey

Federation

Comment ID: 74838 Organization Type: Unaffiliated Individual

Representative Quote: Hunting license sales & Pittman-Robertman Act funds provide 75% of the funds used by wildlife management programs nationwide. These funds provide for projects that benefit game & nongame species. A hunting access program for the Volcanos National Park can provide funds to address issues affecting the park.

Corr. ID: 67 Organization: National Wild Turkey

Federation

Comment ID: 74836 Organization Type: Unaffiliated Individual

Representative Quote: There are a variety of options for a hunting program, which could include some of the follwing features; annual access fee (per hunter and vehicle), a sign- in or call- in procedure combined with a required tag per animal harvested, individual hunting permits distributed through a lottery drawing system, and even an "earn a hunt" volunteer option (X hours of volunteer labor earns a weekend pass to hunt in the park - or- a free entry in the lottery). I'm sure there's a few other options out there too.

Corr. ID: 74 Organization: Not Specified

Comment ID: 75087 Organization Type: Unaffiliated Individual

Representative Quote: I do not agree that it is necessary that the park continues there efforts in the control of ungulate populations. I am coming to you in a total opposite direction by requesting to meet with NPS people in possibly having the park generate income in the process of ungulate control. I want to propose a business plan to you whether it be a special use

permit or license to allow my company to offer guided Mouflon hunts on NPS lands. I am not interested in taking any are away from the public hunters and in fact I do not want to hunt in areas that are frequented by the public. My request is to offer my guided hunts in areas that are costly for the park employees to control the Mouflon population.

Concern ID: 17681

CONCERN Commenters suggested the existing volunteer ungulate management **STATEMENT:** program allow those who have not participated the first opportunity to

participate, allow hunters to keep harvested animals, and provide

assistance to senior or older hunters.

Representative Quote(s):

Corr. ID: 27 Organization: Not Specified

Comment ID: 74847 Organization Type: Unaffiliated Individual Representative Quote: Provide assistance to senior or older hunters who may not be able to walk long distances or carry out harvested game.

Corr. ID: 48 Organization: Not Specified

Comment ID: 74947 Organization Type: Unaffiliated Individual Representative Quote: Create a system where people that haven't been

able to participate in control go first.

Corr. ID: 76 Organization: Not Specified

Comment ID: 75039 Organization Type: Unaffiliated Individual

Representative Quote: The hunters should be allowed to keep all

harvested animals.

AC1000 - Alternative Concepts: Eradication of Ungulates

Concern ID: 17682

CONCERN Commenters stated that eradication of ungulates is part of the NPS STATEMENT: mission, and sound ungulate management is necessary to restore native

flora and fauna.

Representative
Ouote(s):

Corr. ID: 3 Organization: Not Specified

Comment ID: 74730 Organization Type: Unaffiliated Individual Representative Quote: I believe that ungulate eradication is the first and most important step towards restoring and protecting the native

ecosystems in the park. I fully support using whatever management techniques are the most cost- effective and efficient in removing ungulates

from the park.

Corr. ID: 18 Organization: Not Specified

Comment ID: 74920 Organization Type: Unaffiliated Individual Representative Quote: I have worked in HAVO, where the forest is protected; the loss and degradation stops when there are no more ungulates. Native plants come back, and native birds come back to use them.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75563 Organization Type: Unaffiliated Individual Representative Quote: Thus, we see that an unwise ungulate management

practice in one area resulted in widespread impacts and expenses

elsewhere to other landowners. Large numbers of mouflon have been and are exiting Kahuku and entering the state lands at Ka'u and Kapapala Forest Reserves and Manuka Natural Area Reserve (and numerous other public and private lands). There, they are causing serious damage to rare species and more intact native ecosystems than are found in equivalent park habitats. There is an NPS responsibility and obligation minimize these adverse consequences. In just the time since HAVO acquired Kahuku and its scourge of mouflon, countless numbers have spread to adjoining lands, and will continue to do so and to wreak ecological havoc until HAVO has implemented meaningful and effective management, including mouflonproof fences. Some neighbors already have been forced to either accept the damage caused by the mouflon or erect expensive fencing. Cooperative management actions among many of the neighbors has helped, but the park should remove their ungulate as directly and as soon as possible. This can be a two- way street, in that pigs are invading previously good habitat in Kahuku from the neighboring Ka'u Forest Reserve.

Corr. ID: 90 Organization: Not Specified

Comment ID: 75571 Organization Type: Unaffiliated Individual Representative Quote: Now that new lands in Kahuku have been added to Hawai'i Volcanoes National Park (HAVO), alien browsers must be eliminated to restore native vegetation over a wide landscape. Ungulate removal is, therefore, essential for restoring the habitat of native plants, insects, and birds.

Corr. ID: 104 Organization: Not Specified

Comment ID: 76606 Organization Type: Unaffiliated Individual Representative Quote: The second best experience can be as a witness to the recovery of the native ecosystems where ungulates have been eradicated after years of impact to the aina

Corr. ID: 110 Organization: Not Specified

Comment ID: 76749 Organization Type: Unaffiliated Individual Representative Quote: Control/eradication of feral, sheep, goat, and mouflan on NPS lands for native resource protection is a vital part of NPS mission statement

Concern ID: 17683

CONCERN STATEMENT: Commenters supported eradicating ungulates and suggested alternative elements related to eradication, including methods of removing animals, appropriate times of year, and the types of animals that should be targeted. Commenters felt that strategies involving less than eradication would be inadequate. They further stated that eradication should be efficient, cost effective, and should be conducted in the air and on the ground, including using fences and monitors to make sure eradication is maintained.

Representative Quote(s):

Corr. ID: 10 Organization: Not Specified

Comment ID: 74795 **Organization Type:** Unaffiliated Individual **Representative Quote:** We need to shoot everything, including lambs and mothers. There is not a way to manage the resources without doing this.

Corr. ID: 63 Organization: Not Specified

Comment ID: 74725 Organization Type: Unaffiliated Individual

Representative Quote: A friend of mine traps pigs in Honokaa town. My point is that the island is being destroyed by pigs that are breeding out-of-control. I have read that to keep the pig population steady, you must remove 70% of them a year. Obviously, the pig hunters are not able to keep up with the exploding pig population. You must use whatever methods are most efficient to rid the park of pigs.

Corr. ID: 67 Organization: National Wild Turkey

Federation

Comment ID: 74833 Organization Type: Unaffiliated Individual

Representative Quote: The choice for 100% eradication has one main pitfall. Maintaining a zero population level of feral ungulates. Once the cull & control shoots have been conducted, regular monitoring must be performed to ensure the goal of complete eradication is maintained. Anything less has the potential of exposing the NPS to distracting and costly legal processes, or at the least, an endless series of outreach meetings to ensure the "concerned" that you (NPS) are doing the everthing possible with limited resources to rectify the situation. Then there'd also be secondary issue of monitoring remote areas of the park for illegal hunting, camping (or whatever)

Corr. ID: 71 Organization: Not Specified

Comment ID: 75125 Organization Type: Unaffiliated Individual

Representative Quote: I support the fencing and eliminating the nonnative ungulates within to preserve native ecosystems of Hawaii. Nonnative grazing mammals and mammal predators have long been know as scourges in Hawaii and other island ecosystems. NPS protects and conserves what is special about designated park lands, and to do this in Hawaii, it is necessary to remove these animals.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75570 Organization Type: Unaffiliated Individual

Representative Quote: I do hope that the preparers of the forthcoming management documents will incorporate these concerns that I have raised into the planning, and will weigh heavily on the park's long history of successful animal eradication and also on those other similarly motivated organizations elsewhere who have been successful with a variety of effective techniques. Other techniques have been assess, tried and discarded, including the sterilization and translocation options. The technology of eradication and the adverse consequences of ungulate impacts are both well known, so please resist the temptation to re-invent the wheel with new "methods", and just get on with the eradication. The longer ungulates are allowed to remain, the more ecological degradation occurs, and the less recovery can be ultimately realized. To do less is not acceptable. Please keep up your park's tradition of effective, timely management.

Corr. ID: 102 Organization: Not Specified

Representative Quote: 3) The hunting or eradication should be swift concentrated and heavy. Two man teams should be placed at all gates with semiautomatic rifles to greet returning mouflon when the aerial and east west boundary shooting begins. The boundary shooters will begin the day from the edges driving the mouflon into the center of lava above the fence.

There should be three helicopters with shooters (each chopper has it's own

fly zone or kill zone) the choppers would start just above the forest and push towards the summit. We would create pandemonium in the mouflon breaking down all their leadership and herd instincts thus exposing them to prolonged shooting. I suspect that this approach or adjusted similar approach will result in a very high kill rate, as well making mouflon available for aerial shooting that should continue for at least two more days. Don't allow them to set up their social structure again. There should be a crew that hunts mouflon until they are all gone or at such low numbers that you can allow them to hui and not be hunted for four to five months when you suddenly pounce on with everything again and finish them off.

Corr. ID: 102 Organization: Not Specified

Comment ID: 76699 Organization Type: Unaffiliated Individual

Representative Quote: 4) Timing will be important!! You will want to close gates or start shooting during lambing season. Breeding season is good because lambs are very mobile and following their mothers. This will prevent mothers with lambs from hanging back in the forest when the gates close. Also there is mouflon bait available now and it should be employed on the lava above the gates. Not close to the gates! The fence builders could be feeding as they go along the building. It will sensitize the mouflon to human sent so when cameras are being passively checked no grave fear is elicited in the mouflon. Everthing you do must be towards the day we close the gates and start eradication. I will not go into all the things we know about animal removal from eco- sensitive sites your Resource Managers know these things all to well.

Corr. ID: 103 Organization: Not Specified

Comment ID: 7664I Organization Type: Unaffiliated Individual Representative Quote: Outside of HAVO additional practices of ungulate removal have been tried- some with success, some without. The island of Kaho'olawe was quickly cleared of ungulates using only aerial and ground shooting, without fences, and Lana'I Island was cleared of goats similarly. Directed ground- based shooting has achieved similar results on numerous small islands elsewhere in the Pacific and other oceans.

Thus, the experiences at HAVO, HALE, KALA and elsewhere have shown that a variety of proven techniques can quickly achieve complete removal of ungulates from sizable areas, that is as long as the goal is eradication.

Corr. ID: 104 Organization: Not Specified

Comment ID: 76608 Organization Type: Unaffiliated Individual

Representative Quote: Serious land managers in Hawaii have learned through these national park service examples that to truly mange for fully diverse native ecosystems in Hawaii requires zero tolerance or eradication. This can only be achieved through exclusionary fencing, diligence in ungulate eradication and implementing this management as quickly as possible both to save as much of the original diversity as possible but also to prevent unnecessary suffering of multiple generations of targeted ungulates. Long drawn out control efforts will result in more animals birthed into management units which will ultimately increase the number that eventually need to be removed. Decisive and expeditious management has been shown to lead to more complete natural recovery and ultimately fewer animals that need to be removed.

Concern ID: 17684

CONCERN Commenters opposed eradication for a variety of reasons: eradication is **STATEMENT**: inhumane, ungulates are used for food and should not be removed,

ungulates provide fertilizer for plants, eradication may increase weeds, and there is little scientific basis for eradication. Other commenters prefer a balanced or gradual approach, not necessarily complete eradication.

Representative Quote(s):

Corr. ID: 8 Organization: Not Specified

Comment ID: 74769 **Organization Type:** Unaffiliated Individual **Representative Quote:** We need to balance our resources. Don't eradicate the animals - protect them.

Corr. ID: 10 Organization: Not Specified

Comment ID: 74797 Organization Type: Unaffiliated Individual Representative Quote: Overpopulation is bad, and eradication is just as bad. Now there are so many nonnative plants on this island, and animal removal would make it worse.

Corr. ID: 24 Organization: Not Specified

Comment ID: 74851 Organization Type: Unaffiliated Individual Representative Quote: We do not need to eradicate the ungulates. The state and the feds want to eradicate something that the people use for food.

Corr. ID: 33 Organization: Not Specified

Comment ID: 74792 Organization Type: Unaffiliated Individual Representative Quote: Some animals must be maintained to provide

fertilizer for plants. It is part of the nutrient cycle.

Corr. ID: 34 Organization: Not Specified

Comment ID: 74785 Organization Type: Unaffiliated Individual

Representative Quote: Eradication inhumane

Corr. ID: 48 Organization: Not Specified

Comment ID: 74956 Organization Type: Unaffiliated Individual Representative Quote: Don't manage it all at once for eradication. Bring populations down in stages to see how the land reacts.

Corr. ID: 54 Organization: Not Specified

Comment ID: 75001 Organization Type: Unaffiliated Individual

Representative Quote: Eradication is the wrong way.

Corr. ID: 68 Organization: Hawaii Island Game

Management Plan Working Group

Comment ID: 74826 Organization Type: Unaffiliated Individual

Representative Quote: I support the effort of the NPS to manage populations of non- native ungulates within the borders of the Hawaii Volcanoes National Park. However, I believe the necessity for complete eradication to maintain native ecosystems is unwarranted and based on faulty scientific rationale.

Corr. ID: 74 Organization: Not Specified

Comment ID: 75084 Organization Type: Unaffiliated Individual Representative Quote: I strongly fell that balance is the key to survival of any habitat. I do not believe in allowing animals to reproduce beyond control. The population of mammals in the Kahuku area has justification to reduce there numbers but at the same time I feel attempting to completely

wipe them out will pose yet another problem that so many people do not wish to address, because Hawaii has such a mild climate and lush fertile soils, the big concern should be invasive weeds.

Concern ID: 17849

CONCERN Commenters stated that reduction rather than eradication is futile, costly,

STATEMENT: and can result in killing more ungulates than necessary.

Representative Corr. ID: 103 Organization: Not Specified

Quote(s):

Representative Quote: While ungulate control at HAVO began in the 1920's, with a landscape infested with large amounts of goats and pigs, and some sheep, donkeys and other strays, in was extremely ineffective until the 1970's. For a half century, UM followed a futile set of practices focused on reduction rather than complete removal of the ungulates in the park. The practice was in effect the same as that practices a sustained yield game management, where the goals are to maintain the presence of many game animals and to maximize the harvests year after year. While park reports noted huge numbers of ungulates removed from the park year after year, the primary metric they focused on was flawed- the park managers focused on what was removed, rather than what was left in the park. The consequences to native ecosystems at HAVO were devastating in the areas with the greatest exposure to ungulates.

AC10000 - Alternative Concepts: Direct Reduction

Concern ID: 17685

CONCERN Commenters stated support for direct reduction and suggested that STATEMENT: methods other than direct reduction would waste money and put natural

resources at risk.

Representative *Ouote(s):*

Corr. ID: 18 Organization: Not Specified

Comment ID: 74916 Organization Type: Unaffiliated Individual Representative Quote: I strongly support this program to control feral ungulates, including direct reduction. I have seen a lot of forests, and unprotected ones go down hill. They lose native species - after 5 years they will lose rare species that were once there. I have seen this at HAVO and other forest reserves, including private forests.

Corr. ID: 89 Organization: Not Specified

Representative Quote: In the light of all of the aforementioned comments, garnered over 3½ decades of proximity to and experience with ungulate impacts and control efforts, I find it alarming that HAVO has presented the suite of "Preliminary Management Concepts" that it has. All have been tried locally and/or elsewhere, and the only method set that has shown any practical effectiveness is the "Direct reduction&" set. To consider others is a waste of time and money, and a sacrifice of irreplaceable biological resources lost during the consideration period. Should any method set other than Direct Reduction alone be selected, it would be an irresponsible travesty to the native resources of the park and adjoining landscapes.

AC11000 - Alternative Concepts: Reproductive Control

Concern ID: 17687

CONCERN Commenters stated that with reproductive control animals would continue

STATEMENT: to consume natural resources. Commenters felt that introducing

reproductive control hormones into a fragile ecosystem is of concern because it has been shown to cause complications for other life forms, and

the effects on human consumers are unknown.

Representative Quote(s):

Corr. ID: 2 Organization: Not Specified

Comment ID: 74714 Organization Type: Unaffiliated Individual Representative Quote: The reproductive control method might be a poor solution depending on how it is implemented, because introducing synthetic hormones into a fragile ecosystem has been shown to cause

unintended complications for other creatures.

Corr. ID: 9 Organization: Not Specified

Comment ID: 74781 Organization Type: Unaffiliated Individual Representative Quote: Animal control - reproductive control: I heard about this 15 years ago. It started in New Zealand. We cannot have reproductive control if you allow meat to be taken and consumed by people because of the secondary effects that are unknown.

Corr. ID: 104 Organization: Not Specified

Representative Quote: Attempts at contraceptive control will leave a portion of the target animals consuming the resource the public has entrusted the national park service to perpetuate and relocation of animals requires not only capture but transport out of the management area which will be a tedious effort that will result in unacceptable damage to the resource for the transport alone.

AC12000 - Alternative Concepts: Combination of Management Approaches

Concern ID: 17689

CONCERN Commenters supported both hunting and fencing to reduce threats to **STATEMENT:** native plants and animals. Commenters stated that fencing is important to

keep ungulates from nearby lands from entering the park.

Representative Corr. ID: 51 Organization: Not Specified

Quote(s):

Comment ID: 74897 Organization Type: Unaffiliated Individual

Representative Quote: Allow sport hunting and use fencing. If you allow hunting without fencing, the national park will become a drain. Animals from other lands will fill the void and result in taking more animals that

belong to others (private and state lands).

Corr. ID: 71 Organization: Not Specified

Comment ID: 75126 Organization Type: Unaffiliated Individual Representative Quote: As they increase in number, ungulates represent an

increasing threat to the native plant an animal species of park lands.

Fencing is vital to keep our further incursions of grazing mammals; hunting

over time will reduce the numbers of invasive ungulates and allow the restoration of native ecosystems.

AC13000 - Alternative Concepts: Fencing

Concern ID: 17690

CONCERN Commenters stated that fencing can be effective at excluding ungulates **STATEMENT:** from areas and could be useful for eradication and preserving natural

resources, but commenters were concerned about the expense. Some commenters suggested that using snares in addition to fencing is important in restoring natural resources. Specific management techniques suggested included: using Time Domain Reflectometry (TDR), fencing various areas over a multi- year period, manned gates, and use of other management

activities along with fencing, such as snares.

Representative Ouote(s):

Corr. ID: 33 Organization: Not Specified

Comment ID: 74790 Organization Type: Unaffiliated Individual Representative Quote: Style of hog- wire fencing can be a concern. Goats can get hung up in the holes in the fence. Create small areas of fencing

around endangered species.

Corr. ID: 64 Organization: Not Specified

Comment ID: 74722 Organization Type: Unaffiliated Individual Representative Quote: Limited park funds must be conserved to spend on

fencing and maintenance of infrastructure.

Corr. ID: 66 Organization: Not Specified

Comment ID: 74700 Organization Type: Unaffiliated Individual Representative Quote: One aspect of controlling ungulates is to keep them out after they have been removed. This control usually consists of a fencing system and monitoring the integrity of that system.

Monitoring is a time consuming and labor intensive process, a process involving visual inspection of the fence line, a process that can be reduced using electronic means. I suggest the use of Time Domain Reflectometry, TDR, as one of the methods. TDR is used by power and cable companies to determine where a break has occurred in their system.

In TDR, a pulse is sent down the line and reflected at a break or short, giving the distance to that problem. It acts like radar for electric wires. If a wire is placed along the top of a fence and at the bottom and it is disturbed by a tree landing on it or is cut, the distance to that problem can be easily determined. Distances measured can be up to 10,000 feet or more.

I had proposed this system for Fish and Wildlife when I worked for them. A test setup was done, using equipment loaned by the manufacturer, and the results showed that the equipment could easily find faults in the electric wire. Although the system could have saved them time and money, they decided not to use it, I don't know why, but many thought it was a good time saver.

The risk to the public is minimal, as the voltages used are small and non-lethal. Monitoring of the fence line could be done daily or hourly. It could be combined with other electronic methods, with TDR determining where the fault is.

The equipment is not cheap, but would pay for itself in labor savings. Fence lines could be divided up into sections that would be covered by the TDR's max monitoring distances.

Corr. ID: 80 Organization: Not Specified

Representative Quote: Removal of cattle from the pasture areas of the Kahuku unit could be a gradual process. As areas of the pasture are fenced for ungulate control, the cattle can be removed along with other ungulates. This could happen over a multi- year period, until the available pasture area has been reduced to the point where ranching is not economically viable for the lessee. I would see this reduction in grazing being driven by the rate at which fencing can be accomplished, taking up to a decade to complete. Although all cattle could be removed when the current lease expires in 2009, without the ability to control the other ungulates in the pastures, recovery of the native forest would be limited. Gradual removal of the cattle could also help ease the public perception of the park's work during the transition from ranch to park.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75562 Organization Type: Unaffiliated Individual

Representative Quote: Not only was there ecological impact, but the invading mouflon necessitated the construction of large amounts of tall fencing to keep more mouflon from entering, as these high-jumping ungulates have made previously adequate normal-height stock and conservation fences obsolete. This came at considerable expense, as HAVO well knows from its own experience.

Corr. ID: 102 Organization: Not Specified

Comment ID: 76697 Organization Type: Unaffiliated Individual

Representative Quote: While a portion of the upper boundary is fenced, I feel the entire boundary going east towards Keauhou should be fenced prior to any serious ungulate removal program is instituted. The fence should have man gates (a four foot wide gate) placed probably every I/2 mile or so for access to the forest. These gates will be used to manage Mufflon prior the actual eradication project start. The mouflon are presently going into the forest now, (due to population increase and foraging requirements) so these gates would be manned with remote sensing cameras to track mouflon movement. The gate will also force the mouflon to go to these gates to forage. So as the fence is being constructed the gates are left open behind the builders thus allowing the mouflon to find the openings. No hunting or harassing of mouflon is to take place during the construction phase. Park resource management personnel may begin to put out cameras and collect mouflon data. Knowing the mouflon movement times will be crucial to the success of the removal program

2) Upon completion of the fence, data gathered on the mouflon movement will be analyzed to determine mouflon movement and select the best times to close the gates behind the mouflon when they come out into the lava

above the forest. This process is not to be taken lightly, it should be done with forethought and care so as not to spook or arouns suspicion in the animals. If all gates cannot be closed in a day, then as the animals return to their gates they will not have reason to panic. The cameras should still be in place so as to count sheep that may not have gone through (invent a one way sheep push gate?) giving you some estimate of what populations may still be in the forest. The hope is to get as many of the sheep out prior to the eradication

Corr. ID: 103 Organization: Not Specified

Representative Quote: I strongly urge immediate use of snares in this region, before and later along with the construction of fences along the boundary. The future health of this area cannot wait. I was recently up there participating in site surveys fo 'alala release. This stretch along the Kahuku- Ka'u Forest Reserve boundary is the best we saw for release, and both mouflon and feral pigs are rapidly degrading it. This bird is extinct in the wild and its future is totally dependent upon release into quality habitat soon. The quality is there now, but to let it degrade, then "restore" it would be unethical, much less too late.

Corr. ID: 105 Organization: The Nature Conservancy
Comment ID: 76617 Organization Type: Non-Governmental
Representative Quote: However, we believe that an effective strategy for mouflon management must include timely completion of the boundary fence between HAVO and the Forest Reserve and aerial shooting by trained professionals throughout the Kahuku section of the Park.
Corr. ID: 112 Organization: U.S. Fish & Wildlife Service

Comment ID: 76869 Organization Type: Federal Government Representative Quote: Based on the information above, we believe that fencing and ungulate removal will be the most effective alternative to

achieve the Plan goals.

Concern ID: 17691

CONCERN Commenters felt that cultural practices needed to be accounted for when

STATEMENT: implementing fencing.

Representative Corr. ID: 101 Organization: Not Specified Quote(s):

Comment ID: 76126 Organization Type: Unaffiliated Individual

Representative Quote: Give the rapid reproduction rates of ungulates, the level of impact per animal, and the slow regeneration rates of native ecosystems, I think a balanced approach necessarily would involve separate areas for natural resource preservation. (i.e. fenced ungulate- free exclosures) and for cultural preservation (i.e. fenced enclosures with some ungulates and some permissible hunting), as I do not believe a single area can be managed to preserve both a healthy native ecosystem and a modest

ungulate population.

Concern ID: 17778

CONCERN Commenters raised concerns about barbed wire fences in open areas

STATEMENT: because barbed wire poses a risk to endangered bats.

Representative Corr. ID: 112 Organization: U.S. Fish & Wildlife Service

Ouote(s):

Organization Type: Federal Government Comment ID: 76872 Representative Quote: The endangered Hawaiian hoary bat (Lasiurus cinereus semotus) is also known to occur within the Park. Hawaiian hoary bats forage for insects from as low as three feet to higher than 500 feet above the ground. Fencing large portions of the Park as a method for controlling ungulates will contribute to the recovery of the majority of the Park's biota. However, when barbed wire is used as fencing, Hawaiian hoary bats can become entangled (Donna Ball pers. comm.. and Jeff Burgett, pers. comm.). there is evidence that barbed wire fences in open areas pose a greater risk to bats than barbered wire fences in forested areas (John Jeffrey, pers. comm.). if the Park's management objectives can be met without using barbed wire as a component of the fences, we recommend eliminating barbed wire from existing and planned fences. Eliminating barbed wire from fences in open areas is especially important.

Corr. ID: 112 Organization: U.S. Fish & Wildlife Service Comment ID: 76871 **Organization Type:** Federal Government

Representative Quote: We also recommend that a preferred alignment for fences be identified within your EIS. Prior to fence construction, biological surveys should be conducted along the proposed fence alignment to determine the location of listed plants, Hawaiian petrel (Pterodroma sandwichensis) or Newell's shearwater (Puffinus auricularis newelli) colonies (collectively known as seabirds). The alignment can then be adjusted to not only avoid impacting plants and seabird colonies, but to include them within the fenced area. Fences should be located at least 15 feet away from listed plants, 30 feet away from seabird colonies, an should be marked with mylar tape. The mylar tape makes fencing more visible to seabirds which reduces collisions with fences (R. Swift 2004).

AC14000 - Alternative Concepts: Provide Access/Right-of-way through Park

Concern ID: 17692

CONCERN STATEMENT:

Quote(s):

Commenters stated that there is insufficient access (roads) to state game reserves and requested that the NPS provide access through Kahuku to state land for hunting (as a means of ungulate control) and for overnight camping. Commenters stated that NPS should also be working with state agencies (Department of Land and Natural Resources and Department of Forestry and Wildlife) to increase access.

Representative

Corr. ID: 28 **Organization:** Not Specified

Organization Type: Unaffiliated Individual Comment ID: 74819

Representative Quote: For Kahuku,

More access including 4 W drive is needed so that hunters can be more effective in hunting animals and better for the scientists who need access the area.

Look at PTA model as successful example of hunters (access) working with military to protect resources.

Corr. ID: 40 **Organization:** *Not Specified*

Comment ID: 74767 Organization Type: Unaffiliated Individual Representative Quote: There was a possibility of getting a Right Of Way to state lands up the mountain of Kahuku. This should be happening. They should also be working with state agencies (DLNR and DOFA) to help develop the program. I would like to see that the Park honor their word that they would allow access to the state land.

Corr. ID: 50 Organization: National Wild Turkey

Federation

Comment ID: 74736 **Organization Type:** Unaffiliated Individual **Representative Quote:** Grant hunters passage to go hunt the state land bordering the National Forest via the access road into the state land. Facilitate a partnership between the state and hunting groups to repair and maintain access road. Work with DLNR to establish a program to permit overnight camping for hunters as drive time is long and the location remote.

Corr. ID: 65 Organization: Hawaii's Wilderness &

Wildlife Association

Comment ID: 74704 Organization Type: Unaffiliated Individual Representative Quote: The Hawaii Volcanoes National Park should also grant access through the park to state lands above for the purpose of controlling the numbers of ungulates in the region. It has also been brought to my attention that the National Park allow a non hunter in the requesting party as to provide a 4- wheel drive vehicle for outer island hunters.

Corr. ID: 78 Organization: Not Specified

Comment ID: 75024 Organization Type: Unaffiliated Individual Representative Quote: Further, as Kahuku Ranch is also an access means to the State lands above Kahuku Ranch, access should also be provided to those hunter groups that want to cross the Kahuku Ranch to get to the State hunting areas. In that the drive is a long one, overnighting should also be considered for these hunting groups.

Corr. ID: 81 Organization: Not Specified

Comment ID: 75365 Organization Type: Unaffiliated Individual Representative Quote: It is important that hunters are allowed access to state land through the park to facilitate ungulate control in areas that need it the most. In addition, a non-hunter should be allowed in the party to provide 4- wheel drive vehicle access for outer island hunters if needed.

Concern ID: 17693

CONCERN One commenter requested increased access to Kahuku hiking and biking

STATEMENT: trails.

Representative Corr. ID: 21 Organization: Not Specified

Quote(s):

Comment ID: 74966 Organization Type: Unaffiliated Individual Representative Quote: How can we access the Kahuku hiking and biking trails? I live next to the Park. They are moving to more sensitive areas. I feel hurt for being kept out from hunting and other uses. Now they don't feel free to go there. I am a bicyclist and it's hard to find a place.

AC15000 - Alternative Concepts: Education and Outreach

Concern ID: 17694

CONCERN Commenters stated that there should be more public communication

STATEMENT: regarding existing volunteer hunter opportunities.

Representative Corr. ID: 27 Organization: Not Specified

Quote(s):

Comment ID: 74845 Organization Type: Unaffiliated Individual Representative Quote: Increase notice to public about volunteer hunter

opportunities.

Corr. ID: 30 Organization: Not Specified

Comment ID: 74823 Organization Type: Unaffiliated Individual

Representative Quote: Communication

Re: meetings Re: lottery

Re: location on lottery list

Public meetings are something you need to do to get the process going

Corr. ID: 40 Organization: Not Specified

Comment ID: 74771 Organization Type: Unaffiliated Individual Representative Quote: Put more info out about volunteer program to get

people involved.

Concern ID: 17695

CONCERN STATEMENT: Commenters stated that the local community be included in the planning process for any relocation and removal of non- native ungulates, that there should be increased public outreach, including the involvement of the community of Kau. Commenters stated that modern and traditional methods of communication and outreach should be considered during the planning stages of this project.

planning stages of this project.

Representative Quote(s):

Corr. ID: 41 Organization: Not Specified

Comment ID: 74762 Organization Type: Unaffiliated Individual Representative Quote: The first thing I'd like to address is the lack of

communication regarding this meeting. I found out about this meeting by chance. All I could find was rumors; I couldn't find anything online.

Corr. ID: 79 Organization: Office of Hawaiian Affairs,

Department of Land and Natural Resources

Comment ID: 75378 Organization Type: State Government

Representative Quote: In addition, OHA recommends that the applicant include the local community in the planning process for any relocation and removal of non- native ungulates from the HVNP. Recent ungulate control

projects in other natural area preserves in the state of Hawaii have

encountered opposition because of the lack of communication between the agency and the local community. OHA asks that the inclusion of modern as well as traditional methods be considered during the planning stages of this

project.

Concern ID: 17696

CONCERN Commenters requesting an educational component to the plan/EIS **STATEMENT:** suggested that the NPS implement a hunter education program, teaching

all the styles of hunting. Commenters requested that NPS understand the hunters' perspective, that schools should be involved in the process, and that there should be increased public outreach about detrimental effects on

non-native species.

Representative Quote(s): Corr. ID: 17 Organization: Not Specified

Comment ID: 74964 Organization Type: Unaffiliated Individual Representative Quote: We want to see this turn into an educational

program, where local hunters have the opportunity to use the resources

and get involved.

Corr. ID: 35 Organization: C&S Outfitters

Comment ID: 74739 Organization Type: Unaffiliated Individual Representative Quote: Hunters in the Waimea and Waikoloa and Kohala areas are willing to assist the Park and the State. What we need form both are notices to be sent to the various organizations and outdoor stores to inform the people of lotery, work detail, round-up.

Corr. ID: 39 Organization: Not Specified

Comment ID: 74925 Organization Type: Unaffiliated Individual Representative Quote: We need to talk to the people in local community. Involve Kau. Hunters education program. Teach all the styles of

hunting. When hunters go to get their license they have to go to safety

classes/ so why must there be a guide from the park present?

AC200 - Alternative Concepts: Support Ungulate Management

Concern ID: 17697

CONCERN Commenters supported control and removal of ungulates, stating that **STATEMENT:** eradication would enhance the recovery of listed taxa, promote integrity

within critical habitat units, perpetuate of some of the rarest habitats on the planet, and benefit the Park's ecosystems in general. Some commenters

supported control, but did not believe eradication was necessary.

Representative Ouote(s):

Corr. ID: 2 Organization: Not Specified

Comment ID: 74710 Organization Type: Unaffiliated Individual

Representative Quote: As a landowner below the park and a former environmental studies major in college who has had opportunities to see the destruction caused by feral pigs and goats in California and Hawaii, I would like to add my full support for the control of non- native ungulates

in Hawai'i Volcanoes National Park.

Corr. ID: 7 Organization: Not Specified

Comment ID: 74753 Organization Type: Unaffiliated Individual Representative Quote: Yes, destruction occurs with a lot of animals. But

with the right management, animals can be there too.

Corr. ID: 9

Organization: Not Specified

Comment ID: 74780 Organization Type: Unaffiliated Individual Representative Quote: The animals need to be controlled, not eradicated.

Corr. ID: 12 Organization: Not Specified

Comment ID: 74809 Organization Type: Unaffiliated Individual

Representative Quote: I support the park's plan and approach within the park boundaries to remove the ungulates. The plan is not to control the entire island, but rather the primary goal is to control the ungulates to a degree so as to protect native plants and animals within the National Park. I have been aware of how this is done here and in other parts of the world, and I have been impressed with the care, the science, the monitoring, and the persistence that has gone into the NPS program to control ungulates and weeds. I support what is being proposed.

Corr. ID: 62 Organization: Not Specified

Comment ID: 74728 Organization Type: Unaffiliated Individual Representative Quote: I have seen the damage feral ungulates can cause to native ecosystems (including wild pigs in my own forested back yard). Animals like feral pigs are common across the island and should be removed from areas in the park where the preservation of native plants and animals is the primary goal.

Corr. ID: 79 Organization: Office of Hawaiian Affairs,

Department of Land and Natural Resources

Comment ID: 75380 Organization Type: State Government

Representative Quote: Lastly, OHA is in support of control measures that will protect natural and cultural resources and preserve the cultural landscapes in the HVNP.

Corr. ID: 81 Organization: Not Specified

Comment ID: 75362 Organization Type: Unaffiliated Individual Representative Quote: I think that managing the non- native ungulates is

an important tool for protecting and restoring native habitats.

Corr. ID: 105 Organization: The Nature Conservancy
Comment ID: 76614 Organization Type: Non-Governmental

Representative Quote: The objectives of the Plan/EIS, as outlined in your notice, are right on target. As a conservation landowner adjacent to HAVO, we look forward to continuing collaboration with the National Park Service (NPS) in ungulate management in this region. We are particularly concerned about the unchecked population of pigs and the ongoing expansion of the mouflon sheep population, both within the Park and in the adjacent Ka'u Forest Reserve

Corr. ID: 112 Organization: U.S. Fish & Wildlife Service Comment ID: 76873 Organization Type: Federal Government

Representative Quote: We appreciate the opportunity to provide preliminary comments for the preparation of your EIS and look forward to reviewing the draft document. The removal of ungulates would enhance the recovery of listed taxa, promote integrity within critical habitat units, and benefit the Park's ecosystems in general.

AC2000 - Alternative Concepts: Public Hunting (Open Hunt)

Concern ID: 17698

CONCERN Commenters opposed public hunting, saying that it is ineffective at **STATEMENT:** controlling ungulates, past efforts were unsuccessful, other options are

available, and selectively removing males would skew the population and result in more animals. Other commenters stated that if public hunting is

used, and when it becomes inefficient and is no longer cost- effective, park staff must eradicate the ungulates, using legal and available technology.

Representative Quote(s):

Corr. ID: 80 Organization: Not Specified

Organization Type: Unaffiliated Individual Comment ID: 75370 Representative Quote: Hunters seem to worry about a reduction in the availability of ungulates to hunt. Hawaii Volcanoes National Park is a small part of the Big Island, and there are large areas of publicly owned lands outside the park available to hunters. These other public lands have large herds of animals available for hunting. Excluding ungulates from the park will have no impact on the hunting opportunity or game availability for hunters. Past special hunting programs in the park have not worked to effectively control ungulate populations. It takes just a few animals to do great damage to the native forest. Hunters are interested in the best opportunity to get animals and once populations decline slightly or become wary of hunting, the hunters can go to other areas of the island where the opportunity is better. Public hunting could be part of the removal process as areas of the park are fenced, but once animals become harder to find, other means will be required to eliminate them from the fenced areas.

Corr. ID: 84 Organization: Not Specified

Comment ID: 75349 Organization Type: Unaffiliated Individual

Representative Quote: I live just outside the park's boundary, so I am keenly aware of the local concern about the hunting opportunities in the national park. In my view, this is a misguided and inappropriate consideration. As a national park, HAVO should protect the priceless, endemic Hawaiian biota; not European sheep and pigs. There are many options for hunting these exotic animals on State and other lands in the islands, the park is our best chance to save many of the highly endangered Hawaiian plants, birds, and insects.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75560 Organization Type: Unaffiliated Individual

Representative Quote: Periodically, public hunting is suggested as a primary method of ungulate removal. While one or two examples (outside NPS) might be posed where originally low numbers of ungulates were maintained at low levels with public hunting, and loss of some vulnerable biotic elements was accepted, such situations do not apply to the ungulaterich situations at HAVO. At HAVO, especially in the early 1970's, unsupervised but "deputized" public hunting was allowed between periods of organized intensive staff removal action. The results indicated that the public hunting removals were nor particularly significant, and staff removals were then intensified.

Another example of reliance on public hunting to remove ungulates is being tried in the state's Natural Areas Reserves System, when the public was allowed to hunt them as the primary control method in many of the reserves throughout the islands. The result, after many years, has been completely ineffective control, except at the few NARS where new fences and staff hunting were applied.

A longer- term example continues in Mauna Kea Forest Reserve, where a Federal court ordered the state to eradicate feral and mouflon sheep within the critical habitat of the endangered palila. After initial staff shooting

removed the majority of feral sheep and mouflon on the mountain, state managers turned to public hunting as the primary removal method, supplemented by a few days each year of aerial shooting. In the subsequent decades of this long experiment, the ungulates have continued to spread far beyond the Mauna Kea Forest Reserve, into previously unoccupied native habitats, while they maintain sizeable populations and negative impacts within the Mauna Kea Forest Reserve.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75564 Organization Type: Unaffiliated Individual

Representative Quote: Public hunting can have some negative consequences as well. One example, during the public hunting period at HAVO in the early 1970's, was that the multi- colored goat herds were transformed into hard- to- see black herds - the same color as the background lava flow habitat - as the visibly contrasting animals were shot. Later shooting by park personnel was made more difficult because the herds and individual goats were harder to see and shoot.

Corr. ID: 93 Organization: Not Specified

Comment ID: 75581 Organization Type: Unaffiliated Individual Representative Quote: While recreational hunting of these animals in Hawaii is an important value cited often by the opposition, these activities are not part of the National Park Service's mission statements, and ample areas for hunting are found elsewhere in the islands

Concern ID: 17699

CONCERN STATEMENT:

Commenters stated support for public hunting as a form of ungulate management. Commenters stated that the benefits of hunting include ability to use fees from hunting licenses to fund education programs, providing a food supply, improving public relations, cost effectiveness, and providing recreation for local hunters and brings in tourist hunters. Commenters also felt that hunters could identify plants and pass this information along to NPS.

Representative Quote(s):

Corr. ID: 2 Organization: Not Specified

Comment ID: 74713 Organization Type: Unaffiliated Individual Representative Quote: Hunting could also provide recreation for more local hunters and bring in higher income tourist hunters, adding to the economy.

Corr. ID: 4 Organization: Hawaii Hunter Education

Program

Comment ID: 74742 Organization Type: Unaffiliated Individual Representative Quote: The hunting public deserves an opportunity to assist Volcanoes National Park in a large portion of ungulate reduction.

Corr. ID: 20 Organization: Not Specified

Comment ID: 74969 Organization Type: Unaffiliated Individual Representative Quote: We have hunters in Kau that rely on hunting

grounds for pigs. They are dependant on hunting.

Corr. ID: 36 Organization: Not Specified

Comment ID: 74777 Organization Type: Unaffiliated Individual Representative Quote: Maintain balance b/w govt interest and hunter interests, work with public.

License w/ fee for other uses, besides hunting, such as hiking, like hunters need to do. Hunters paying fees w/license other users are not paying

Older hunters not involved bow b/c of issues at Mauna Kea. No balance between animal and environment.

More roads=more access= more control

Poachers create safety issues, need to try and deter.

Corr. ID: 47 Organization: Not Specified

Comment ID: 74986 **Organization Type:** Unaffiliated Individual **Representative Quote:** Allow sport hunting in Kahuku. The NPS should follow the lead of parks in Africa. Allow us to manage the game. Hunting is very popular here. Something could be worked out for access. If would be good public relations and would be cost effective. The way NPS is doing things is wrong. The local community needs to be able to feed itself. Reach a balance

Corr. ID: 51 Organization: Not Specified

Comment ID: 74895 Organization Type: Unaffiliated Individual Representative Quote: Use local sport hunters that will do it for free.

Corr. ID: 53 Organization: Not Specified

Comment ID: 74994 Organization Type: Unaffiliated Individual

Representative Quote: Designate a hunting preserve.

Corr. ID: 57

Organization: Not Specified

Comment ID: 74888 Organization Type: Unaffiliated Individual Representative Quote: I like to see the public hunting 3,000. Beauty of the animals. I am glad with the NPS and the lottery. Let the public go up there. Maybe something can be worked out. Utilize the meat - don't leave it behind.

Corr. ID: 57 Organization: Not Specified

Comment ID: 74886 Organization Type: Unaffiliated Individual Representative Quote: Public should hunt and get meat - that should continue. Not from helicopters. More for public. It is scary to think you cannot provide for your family. A lot of families depend on animals.

Corr. ID: 61 Organization: Not Specified

Comment ID: 74732 **Organization Type:** Unaffiliated Individual **Representative Quote:** I think that a public hunter program is the key way to go for this issue. There are many factors here, we are not wasting the animal, we are actually applying good wildlife management practices that will be both beneficial and effective to the individual, the natural resources native to the island, and the community, if applied properly it can also serve as an educational process for our youth.

Corr. ID: 68 Organization: Hawaii Island Game

Management Plan Working Group

Comment ID: 74856 Organization Type: Unaffiliated Individual

Representative Quote: This cooperative relationship can be further advanced by allowing public participation in the early phases of ungulate removal when sport hunting can benefit Park Service objectives. As long as public hunter participation is sufficient to meet realistic removal objectives,

there is no reason to restrict this activity with the caveat that using the public hunter will not preclude direct control actions by resource management staff to achieve desired removal objectives. That action should always remain the prerogative of the Park Service.

Corr. ID: 102 Organization: Not Specified

Comment ID: 76700 **Organization Type:** Unaffiliated Individual Representative Quote: 5) The PUBLIC!!! They should be allowed to hunt as they now do in the pastures and up to where the fence is now completed. This will create a sort of no sheep zone for the mouflon and help us corral the mouflon. The public needs to be told that the mouflon are going to go and hunting will be allowed until that time. People cannot be allowed to educate the animals or drive them into the forest. There are I believe firearm regulations in the NPS that could be called into play to prevent any prolonged or continued hunting in the park. The day of the eradication as many sheep as possible could be sling loaded down to a collection point or NOT. The value of a well-planned strike is it will be done with be the time it is reported and the ranting starts. I am not suggesting secrecy you need to say what not when. Or that the project will be completed within a week.

Corr. ID: 106 Organization: Not Specified

Organization Type: Unaffiliated Individual Comment ID: 76803 Representative Quote: Being an avid hunter on the Big Island of Hawaii I would like the NPS to support our recommendation to allow hunting on lands purchased by NPS and access to lands owned by the State.

Corr. ID: 106 Organization: Not Specified

Organization Type: Unaffiliated Individual Comment ID: 76813 Representative Quote: Fees from license would generate funds for other areas of public hunting activities, education programs, ect.

Corr. ID: 107 Organization: Not Specified

Comment ID: 76799 **Organization Type:** Unaffiliated Individual Representative Quote: The means of controlling wild game should first be allowed/ experimented by through the hunting community where game meat will consumed as tablefare.

Concern ID: 17700

Commenters stated that hunting units should be designated, with some **CONCERN**

STATEMENT: suggesting a hunting unit size of 30 plus acres.

Corr. ID: 39 **Organization:** Not Specified Representative Quote(s):

> Comment ID: 74926 **Organization Type:** Unaffiliated Individual Representative Ouote: Let local hunters be involved. Hunting tournament and give awards- game. How many hunters at a time? Need to be licensed. Designate hunting units. Each hunter stay in his designated unit.

Unit size should be 30 plus acres. Hunter check in station. No smoking on hunting trips. No alcohol on hunting trips.

Corr. ID: 58 **Organization:** *Not Specified*

Organization Type: Unaffiliated Individual Comment ID: 74866

Representative Quote: Let local hunters be involved.

Ka'u hunters hunt only in Ka'u.

More scheduled hunts.

Designate hunting units - each hunter stays in his designated unit.

One hunting party 5-6 adults - if kids want to go, they are not counted as adults.

Unit size should be 30+ acres.

Hunters know plants. They can work with the park to locate these plants - the park can fence around these plants and collect seeds to grow.

Hunters check in station 6 a.m. to 6 p.m.

Hunters need to go in and come out with the amount of dogs they went in with. If found a dog that does not belong to them, leave it, and tell the check in station people.

Concern ID: 17701

CONCERN STATEMENT: Commenters stated that NPS should comply with the Executive Order of

August 17, 2007. "Facilitation of Hunting Heritage and Wildlife

Conservation." Commenters felt they had a right to hunt, and would like to

increase access, especially on the weekends.

Representative *Quote(s):*

Corr. ID: 68 Organization: Hawaii Island Game

Management Plan Working Group

Comment ID: 74868 Organization Type: Unaffiliated Individual

Representative Quote: Finally, NPS should comply with the Executive Order of August 17, 2007. Facilitation of Hunting Heritage and Wildlife Conservation. This order directs Federal agencies, including the Department of the Interior, that have activities that have a measurable effect on outdoor recreation and wildlife management, to facilitate the expansion and enhancement of hunting opportunities and the management of game species and their habitat. It directs federal agencies to cooperate with states to conserve hunting opportunities.

Section 2 of the EO states that all Federal agencies shall, consistent with

Section 2 of the EO states that all Federal agencies shall, consistent with agency missions:

- (a) Evaluate the effect of agency actions on trends in hunting participation and, where appropriate to address declining trends, implement actions that expand and enhance hunting opportunities for the public;
- (b) Consider the economic and recreational values of hunting in agency actions, as appropriate;
- (c) Manage wildlife and wildlife habitats on public lands in a manner that expands and enhances hunting opportunities, including through the use of hunting in wildlife management planning;
- (d) Work collaboratively with State governments to manage and conserve game species and their habitats in a manner that respects private property rights and State management authority over wildlife resources;
- (e) Establish short and long term goals, in cooperation with State and tribal governments, and consistent with agency missions, to foster healthy and productive populations of game species and appropriate opportunities for the public to hunt those species;
- (f) Ensure that agency plans and actions consider programs and recommendations of comprehensive planning efforts such as State Wildlife Action Plans, the North American Waterfowl Management Plan, and other range- wide management plans for big game and upland game birds; (g) Seek the advice of State and tribal fish and wildlife agencies, and, as appropriate, consult with the Sporting Conservation Council and other organizations, with respect to the foregoing Federal activities.

AC3000 - Alternative Concepts: Professional Hunting

Concern ID: 17702

CONCERN Commenters stated opposition to the use of helicopters and paid

STATEMENT: professionals for ungulate removal.

Representative Corr. ID: 51 Organization: Not Specified

Quote(s):

Comment ID: 74894 Organization Type: Unaffiliated Individual Representative Quote: Do not want paid professional hunters from New

Zealand or anywhere else.

Corr. ID: 53 Organization: Not Specified

Comment ID: 74992 Organization Type: Unaffiliated Individual

Representative Quote: I don't like aerial shooting.

Corr. ID: 106 Organization: Not Specified

Comment ID: 768II Organization Type: Unaffiliated Individual Representative Quote: Use of shooters from helicopters seems a cruel and

sad means to waste edible fare.

Concern ID: 17703

CONCERN Commenters stated that aerial shooting should take place by trained **STATEMENT:** professionals throughout the Kahuku section of the park, particularly

when other methods are not effective.

Representative Corr. ID: 64 Organization: Not Specified

Quote(s):

Comment ID: 74721 Organization Type: Unaffiliated Individual

Representative Quote: At the point when public hunting becomes inefficient and not cost effective, the Park must then use staff to eradicate the ungulates, using whatever technology is legal and available. The purpose of the National Parks is not to provide hunting opportunities for the public.

AC4000 - Alternative Concepts: Restoration of Vegetation

Concern ID: 17704

CONCERN Commenters stated that the adverse impacts of ungulates on non- adapted **STATEMENT:** ecosystems world- wide is widely known and established. Commenters felt

that ungulate management, including removal of ungulates, is essential for

restoring native vegetation.

Representative Corr. ID: 5 Organization: Not Specified

Quote(s):

Comment ID: 74757 Organization Type: Unaffiliated Individual Representative Quote: Thus, I write to strongly support efforts by Hawai`i Volcanoes National Park to protect and restore native ecosystems by managing alien ungulates. In addition to benefiting endangered plants, such management activities will aid in the recovery of native forests, shrublands, and grasslands, including the native wildlife that inhabits them

and the soil resources that sustain them.

Corr. ID: 88 Organization: Not Specified

Representative Quote: Back in the 1970s, it was difficult to distinguish Mauna Loa Strip from the pasture on either side- - both were grassland with koa trees here and there. Now Mauna Loa strip is densely forested with koa and other native trees and shrubs, while the pastures have nearly lost their trees. Koa trees are preferred forage of ungulates like cattle and mouflon, and when these animals are completely removed, the forest rebounds. The change in Kipuka Puaulu and Kipuka Ki has been most dramatic- - it used to be a wooded pasture, and now it's a dense forest. The park lowlands have also seen the spread of ohia trees, although there have been setbacks from fire. The understory throughout much of the park has recovered from ungulate browsing.

Corr. ID: 89 Organization: Not Specified

Representative Quote: Investigative monitoring documented ungulate impacts and some of the recovery response after ungulate removal. This latter work, plus much more performed where ungulates are not native elsewhere in the world, all point to severe degradation of native ecosystems, and to varying degrees of recovery depending on the degree of cumulative degradation of native ecosystems at the time of eradication. Additional research verifying ungulate damage would be superfluous. The adverse impacts of ungulates on non-adapted ecosystems world- wide is unequivocal.

Corr. ID: II2 Organization: U.S. Fish & Wildlife Service Comment ID: 76865 Organization Type: Federal Government

Representative Quote: Furthermore, disturbance from ungulates suppresses the natural regeneration of canopy species which eventually leads to a loss of native forests

AC6000 - Alternative Concepts: Weed Control

Concern ID: 17705

CONCERN Commenters suggested that ungulates assist in weed control.

STATEMENT:

Representative Corr. ID: 26 Organization: Not Specified

Quote(s):

Comment ID: 74876 Organization Type: Unaffiliated Individual Representative Quote: Need some animals to help maintain forests and

keep out weeds.

Concern ID: 17706

CONCERN Commenters stated that wild pigs can help propagate native plants once

STATEMENT: invasive weed seed sources are eliminated.

Representative Corr. ID: 32 Organization: Not Specified

Quote(s):

Comment ID: 74794 Organization Type: Unaffiliated Individual Representative Quote: A sustainable population should be maintained to provide certain benefits to the environment, such as control of non- native

weeds. Animals (wild pigs) can help propagate native plants if invasive weeds seed source is eliminated.

AC7000 - Alternative Concepts: Fire Management

Concern ID: 17707

CONCERN Commenters felt that eliminating all ungulates would lead to a fire hazard

STATEMENT: because the animals help control vegetation. Commenters felt that

ungulates should be retained to provide fire management.

Representative Quote(s):

Corr. ID: 9 Organization: Not Specified

Comment ID: 74783 Organization Type: Unaffiliated Individual

Representative Quote: The state and feds were trying to eradicate animals in the 1930's: they found that removing animals will create more problems,

including fire hazards. Let the animals come back to control fire management - this would be beneficial to the environment.

Corr. ID: 32

Organization: Not Specified

Comment ID: 74791 Organization Type: Unaffiliated Individual Representative Quote: The animals are needed to eat the underbrush and

reduce fire risk

Corr. ID: 43 Organization: Not Specified

Comment ID: 74919 Organization Type: Unaffiliated Individual Representative Quote: Get rid of all the pigs, sheeps, goats, grazers and browsers. Then will have fire hazard. We need them to a certain extent. I saw New Zealand. Don't use bulldozer. The pigs could do that scouring. Then move the pigs or Kau must grow with ohia alliahi they are all symbolic.

Corr. ID: 65 Organization: Hawaii's Wilderness &

Wildlife Association

Comment ID: 74702 Organization Type: Unaffiliated Individual Representative Quote: Due to environmental impact issues and the eradication of sheep, Mauna Kea has grown into a fire hazard just waiting to explode due to the excessive amount of forage thats out there. If it does burn, you lose everything that is being protected, literally everything.

AC8000 - Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff)

Concern ID: 17708

CONCERN Commenters felt that local hunters could help manage ungulates and use **STATEMENT:** the meat to feed their families, and that a monetary incentive could be used

as a way to encourage volunteer participation. Some commenters strongly supported the idea of using local hunters, stating that it is an economical, efficient and a quick control method. Commenters supported a lottery system and would like more information about the current lottery system.

Representative Corr. ID: 8 Organization: Not Specified

Quote(s):

Comment ID: 74773 Organization Type: Unaffiliated Individual Representative Quote: We don't need hunters from the mainland - keep

it local. Ask us. Keep people involved. Allow us to be a part of this.

Corr. ID: 10 Organization: Not Specified

Comment ID: 74793 Organization Type: Unaffiliated Individual Representative Quote: Let local people hunt the game. Don't spend public money to bring in outsiders to get rid of our game. We know what is

there. This would be infringing on island culture.

Corr. ID: 17 Organization: Not Specified

Comment ID: 74972 Organization Type: Unaffiliated Individual Representative Quote: We need to emphasize the use of locals for help and support.

Corr. ID: 23 Organization: Not Specified

Comment ID: 74858 Organization Type: Unaffiliated Individual

Representative Quote: I commend the NPS for almost 100 years of preserving ecosystems I am in favor of methods used, and encourage public assistance so everyone can be involved.

Corr. ID: 26 Organization: Not Specified

Comment ID: 74871 Organization Type: Unaffiliated Individual Representative Quote: Increase notice to public about volunteer hunter opportunities.

Corr. ID: 37 Organization: Not Specified

Comment ID: 74774 Organization Type: Unaffiliated Individual Representative Quote: volunteer hours should be tracked and counted for "in kind" services and potential grant matchig purposes.

Corr. ID: 49 Organization: Not Specified

Comment ID: 74961 Organization Type: Unaffiliated Individual Representative Quote: We people who want to hunt should be given more complete and up front information about the volunteer control program. Volunteers should know this is for the purpose of eradication. Educate about the risks of leaving any ungulates. Inform people of the need for local participation to avoid outsourcing. Consider trapping and removing instead of eradication.

Some sort of incentive (monetary) as a way to encourage volunteer participation but still save money compared to the use of professional hunters.

Corr. ID: 64 Organization: Not Specified

Comment ID: 74720 **Organization Type:** Unaffiliated Individual **Representative Quote:** The use of public hunting prior to Park staff suppression leading to eradication is certainly a popular option and I am not opposed to it. It is being used in the new Kahuku extension of the Park but I do regret that it is available to hunters nation-wide (rather than local

hunters getting priority), but I assume this is a federal policy

Corr. ID: 67

Organization: National Wild Turkey Federation

Comment ID: 74831 Organization Type: Unaffiliated Individual

Representative Quote: Please keep the volunteer hunter

program. Hunting can be a powerful tool to control populations of feral ungulates. Hiring sharpshooters, no matter where they're from, will cost

money. Administering a program for hunting in the park can be a revenue neutral project, as opposed to an expense.

Corr. ID: 73 Organization: Not Specified

Comment ID: 75104 **Organization Type:** Unaffiliated Individual **Representative Quote:** It is a disgrace to the people of Hawaii to know that our governments willing to hire outside hunters to eradicate these animals and leave the carcasses there to rot while people go hungry. What a waste. Therefore local hunters who are more than willing to hunt these animals at no cost, just to provide meat to feed their families. Why is this not an option to be considered as part of management of non- native

ungulates? This should be the only option!

Corr. ID: 78

Organization: Not Specified

Comment ID: 75023 Organization Type: Unaffiliated Individual Representative Quote: The current method of hunting with two volunteer hunters paired with a Federal hunter is safe and insures the well-being of the hunters. Perhaps with more hunter knowledge of the terrain and the National Park perhaps registering the volunteer hunters, the groups could

possibly hunt on their own in the Kahuku Ranch land. Corr. ID: 81 Organization: Not Specified

Comment ID: 75364 Organization Type: Unaffiliated Individual Representative Quote: The volunteer hunting program is a safe, effecient, and cost effective means for controlling the ungulate population. In addition this effort also provides hunting opportunities and allows resident hunters to contribute to restoring native habitats.

Concern ID: 17710

CONCERN Commenters stated that the park should involve local people in monitoring

STATEMENT: the effects of ungulates on resources.

Representative Corr. ID: 42 Organization: Not Specified

Quote(s):

Comment ID: 74922 Organization Type: Unaffiliated Individual Representative Quote: Would like to see more involvement of park with local folks to monitor affects of ungulates on resources. Increased opportunities for Kau residents to participate in hunting and more

frequently.

AC9000 - Alternative Concepts: Capture and Relocation

Concern ID: 17711

CONCERN Commenters stated that relocation is not practical because other areas in

STATEMENT: Hawaii would not benefit and could be damaged.

Representative Corr. ID: 63 Organization: Not Specified

Quote(s):

Comment ID: 74726 Organization Type: Unaffiliated Individual Representative Quote: Please don't even think about moving the pigs to

other areas. The other areas are probably already full of pigs.

Corr. ID: 71 Organization: Not Specified

Comment ID: 75127 Organization Type: Unaffiliated Individual

Representative Quote: Hunting is the only practical way. Relocation is not practical as there are not other lands in Hawaii which could benefit form

introducing these animals.

Corr. ID: 105 **Organization:** The Nature Conservancy Comment ID: 76618 **Organization Type:** Non-Governmental Representative Quote: We recommend strongly against relocating of

ungulates as adjacent lands are native-dominated and harbor many native plants and animals that will be negatively affected. Moving the problem is no solution. Further, relocation is expensive and time-consuming. It

diverts staff time and funding away from higher priority work

Concern ID: 17712

CONCERN STATEMENT: Commenters suggested places to which ungulates could be relocated.

Representative Quote(s):

Corr. ID: 65 Organization: Hawaii's Wilderness &

Wildlife Association

Comment ID: 74705 **Organization Type:** Unaffiliated Individual

Representative Quote: I was under the impression that the National Park might consider trapping some of these animals for relocation purposes. If this is true, I would be interested in providing a place to keep them. I too have a sheep operation that uses the flock to control the invasive "Fireweed" that has taken over the majority of the Big Island. Under a controlled grazing and management practices program, I have managed to control this weed and at the same time keep the fuel load down for fire during the dry time. I believe that there is a way to use ungulates for these

types of purposes.

Concern ID: 17713

CONCERN Commenters stated that local hunting groups could support trap and **STATEMENT:** transfer programs. Commenters felt that capture and removal could

prevent inbreeding in Kahuku.

Representative Quote(s):

Corr. ID: 40

Organization: Not Specified

Organization Type: Unaffiliated Individual Comment ID: 74770 Representative Quote: Maybe capture and remove is a good idea to avoid

inbreeding in Kahuku, which is going on. Put them on state lands. Corr. ID: 50 **Organization:** National Wild Turkey

Federation

Comment ID: 74735 Organization Type: Unaffiliated Individual Representative Quote: Also create a program to remove the ungulates alive for relocation. Local hunting groups can be used to support these

types of trap and transfer programs.

AE10000 - Affected Environment: Rare or Unusual Vegetation

Concern ID: 17714

Commenters stated that ungulate management activities have caused **CONCERN** impacts on rare plants in adjacent, more intact native ecosystems and on **STATEMENT:**

lands outside the park boundary. Commenters stated that selective

browsing by mouflon has damaged native plants, including threatened and endangered plants.

Representative Quote(s):

done.

Corr. ID: 86 Organization: Not Specified

Comment ID: 75425 Organization Type: Unaffiliated Individual Representative Quote: All the evidence and data collected in studies carried out by the Park Service and others have showed that feral animal damage leads to loss of native species, establishment of non- native plants, and in severe cases, complete loss of native vegetation (as in Eastern Molokai and many lowland sites on this island).

Corr. ID: 89 Organization: Not Specified

Representative Quote: One of the previously mouflon- free areas that became infested with Mauna Kea mouflon was Kamehameha Schools' Keauhou Ranch, recently released from grazing cattle in order to allow recovery of native species. In just several years, most of the ranch was invaded by by mouflon. These animals quickly removed many of the elements of native plant diversity, leaving very depauperate communities in the areas where they were not fenced out. Because of selective browsing habits of the mouflon, this damage was concentrated on suites of sensitive native plants, some endangered, which disappeared rapidly. Concentrated staff hunting and new tall fences were effective in eliminating the over- 300 sheep from the ranch once they were initiated, but the severe damage was

Corr. ID: 103 Organization: Not Specified

Comment ID: 76653 Organization Type: Unaffiliated Individual Representative Quote: Thus, we see that an unwise ungulate management practice in one area resulted in widespread impacts and expenses elsewhere to other landowners. Large numbers of mouflon have been and are exiting Kahuku and entering the state lands at Ka'u and Kapapala Forest Reserves and Manuka Natural Area Reserve (and numerous other public and private lands). There, they are causing serious damage to rare species and more intact native ecosystems than are found in equivalent park habitats. There is an NPS responsibility and obligation minimize these adverse consequences. In just the time since HAVO acquired Kahuku and its scourge of mouflon, countless numbers have spread to adjoining lands, and will continue to do so and to wreak ecological havoc until HAVO has implemented meaningful and effective management, including mouflonproof fences. Some neighbors already have been forced to either accept the damage caused by the mouflon or erect expensive fencing. Cooperative management actions among many of the neighbors has helped, but the park should remove their ungulate as directly and as soon as possible. This can be a two- way street, in that pigs are invading previously good habitat in Kahuku from the neighboring Ka'u Forest Reserve.

AE11000 - Affected Environment: Species of Special Concern

Concern ID: 17715

CONCERN Commenters stated that Hawaii is home to numerous species of concern **STATEMENT:** and expressed concern that species such as 'Alala and Po'ouli have gone

extinct as a result of habitat degradation.

Representative *Quote(s):*

Corr. ID: 5 Organization: Not Specified

Comment ID: 74754 Organization Type: Unaffiliated Individual Representative Quote: Hawai'i's native plants and animals are a global treasure. Evolving in splendid isolation over millions of years, the plants and animals exhibit patterns of diversity that are unrivaled elsewhere on Earth. Of Hawai'i's approximately 1,000 native plants, over 90% are found only in the archipelago. Especially striking are the many examples of adaptive radiation, in which original immigrants to the islands, having dispersed over great distances of open ocean, subsequently evolved into dazzling arrays of plants exhibiting great variation in form and habitat preference. Based on its spectacular biological diversity, Hawai'i is renowned as a "living laboratory" of evolution, or as a place where the mysteries of nature unfold before our eyes. Of the approximately 600 endangered plants in the U.S., more than 45% grow only in Hawaii. Over 100 of these species, each with fewer than 50 individuals left in the wild, teeter on the edge of extinction.

Corr. ID: 25 Organization: Not Specified

Representative Quote: Having lived in Hawai`i for 14 years, I have witnessed the extinction of the Po`ouli and the extirpation of the `Alala from the wild. These losses were the direct result of the failure to protect important habitat for native species. Forest habitats were severely degraded by non- native ungulates, primarily feral pigs.

AE12000 - Affected Environment: Wildlife and Wildlife Habitat

Concern ID: 17717

CONCERN Commenters stated that the extant herd of pure mouflon is a valuable **STATEMENT:** wildlife resource that is in high demand by hunters. Commenters felt that

mouflon are a resident game species and thus should be subject to state

rules.

Representative Corr. ID: 68

Quote(s):

Corr. ID: 68 Organization: Hawaii Island Game

Management Plan Working Group

Comment ID: 74859 Organization Type: Unaffiliated Individual

Representative Quote: The extant herd of pure mouflon is a valuable wildlife resource for the state of Hawaii. They are in high demand by hunters, as evidenced by the lottery system used to hunt mouflon on Lanai. They are a resident game species even on federal land, regardless of their

biogeographical origin, and thus should be subject to state rules.

Concern ID: 17718

CONCERN Commenters described the damage caused by non- native ungulates on sTATEMENT: native plants and animals and stated that studies have demonstrated the

damage that ungulates cause. Commenters noted the impact that ungulates have had on Kahuku. One commenter observed the improved quality of the landscape for native wildlife species at Hawaii Volcanoes National

Park, as a direct result of ungulate control, since the mid 1970's.

Representative Ouote(s):

Corr. ID: 19 Organization: Not Specified

Comment ID: 75006 Organization Type: Unaffiliated Individual Representative Quote: I am a biologist for the USGS, studying native

forest birds. I am doing bird counts from all over the states of native forests,

and over the last 30 years, Hawaiian birds are decreasing.

Corr. ID: 82

Organization: USGS-PIERC

Comment ID: 75358 Organization Type: Unaffiliated Individual

Representative Quote: Damage to the native forest understory by ungulate grazing is very extensive in many, if not most, forested areas. This was distressingly apparent during a recent bird survey in the Kau Forest Reserve. The upper forest(>1,500m) in the area I surveyed was almost completely devoid of understory plants and regeneration by ohia and koa. Bird species such elepaio and omao that rely on complex forest structure were absent from areas in which they occurred less than 30 years ago. Areas below 1,500m had a well develop understory but showed considerable pig activity and damage throughout. Numerous hapuu ferns were downed, hollowed out and harbored mosquito larva (even at 1,000m elevation). The facilitation by pigs of mosquito breeding habitat poses a significant threat to at-risk bird species such as the iiwi.

Corr. ID: 83 Organization: Not Specified

Comment ID: 75352 Organization Type: Unaffiliated Individual Representative Quote: Ungulates can have devasting effects on Hawaiian ecosystems and individual species. Both scientific evidence and individual observation show that ungulates in Hawaii:

- I) create soil disturbance, affecting regeneration and soil properties (esp. pigs)
- 2) create wallows where mosquitos can breed, many of which carry avian pox and malaria
- 3) eat native plant species hindering their growth and reproduction 4) spread exotic plant species.

Corr. ID: 84 Organization: Not Specified

Representative Quote: The grazing and other direct damage caused by these animals eliminates native species and destroys or degrades the habitat, in direct conflict with the park's goals of protection and stewardship of the natural resources. There are also a suite of significant indirect effects caused by non- native ungulates. Pigs destroy the native plants and through eating the tree ferns and rooting on the ground create breeding habitat for non- native mosquitoes, which increases disease transmission in the native birds - one of the leading causes of bird decline

and extinctions. The ungulate- causes habitat destruction and degradation

facilitates the invasion of native systems by non- native plants, creating a vicious, positive feedback loop of ecosystem damage.

Corr. ID: 85 Organization: Not Specified

Comment ID: 75343 Organization Type: Unaffiliated Individual

Representative Quote: I have observed the improved quality of the landscape for native wildlife species at HVNP, directly as a result of ungulate control, since the mid 1970's. Landscapes that were once filled with herds of goats, pastures that once had cattle, and forests rampant with pigs are recovering or fully restored and now thriving, because fences were installed and ungulate populations were reduced to zero.

I consider Hawaii Volcanoes National Park (HVNP) the best place on Earth. I thank my lucky stars every day that I am fortunate to be living near such a great place. I urge the National Park Service to continue ungulate management and protection of endangered species habitat in perpetuity.

Corr. ID: 85 Organization: Not Specified

Comment ID: 75342 Organization Type: Unaffiliated Individual

Representative Quote: Early settlers brought ungulates (hoofed animals such as pigs, goats, cattle) in seagoing vessels from foreign lands. Forest health declined and biological diversity dwindled, once these animals were allowed to free- range forage for food. Pigs are destructive and dangerous animals that dig up the forest, spread weedy species and reproduce to large populations very quickly. Goats eat just about everything and leave little behind to sustain healthy native wildlife populations. Species native to Hawaii did not evolve with any sort of protection from ungulates with large appetites.

Corr. ID: 89 Organization: Not Specified

Representative Quote: I was recently up there participating in site surveys for 'alala release. This stretch along the Kahuku- Ka'u Forest Reserve boundary is the best we saw for release, and both mouflon and feral pigs are rapidly degrading it. This bird is extinct in the wild and its future is totally dependent upon release into quality habitat soon. The quality is there now, but to let it degrade, then "restore" it would be unethical, much

Corr. ID: 94 Organization: Not Specified

less too late.

Comment ID: 75586 Organization Type: Unaffiliated Individual

Representative Quote: With the continued presence of ungulates the remaining native ecosystems will disappear. Time is critical to saving the most imperiled of these resources. Even in the few years since the park has acquired Kahuku ranch at least one of these species has been extirpated. Although some people in the community would like to see balance by keeping some of the animals, even one animal can destroy a plant population. When many of these native plant and animal species are lost from Hawaii they are lost from the planet.

Corr. ID: 103 Organization: Not Specified

Comment ID: 76637 Organization Type: Unaffiliated Individual

Representative Quote: The decades of ineffective UM maintained acted to maintain at least some ungulates throughout the park landscape, continuously degrading a wide variety of habitats. This resulted in the decline and disappearance of many species of native plants and animals,

both directly and by the consequences of ungulate- enhanced alien plant invasion. While habitat degradation can be stopped, stabilized and improved upon removal of ungulates, the loss and serious decline of most species from the areas tends to be a permanent form of degradation. This latter is the situation that exists at the Kahuku section of HAVO today.

Corr. ID: 112 Organization: U.S. Fish & Wildlife Service Comment ID: 76857 Organization Type: Federal Government Representative Quote: Hawaiian ecosystems evolved in the absence of mammalian herbivores and a consequence, are extremely vulnerable to damage by introduced ungulates

AE13000 - Affected Environment: Cultural Resources

Concern ID: 17719

CONCERN Commenters stated that they value hunting, gathering, and farming as part **STATEMENT:** of their culture, and felt that it should be taught to future generations.

Commenters do not want hunting opportunities to decline.

Representative Corr. ID: 15 Organization: Not Specified

Quote(s):

Comment ID: 74814 Organization Type: Unaffiliated Individual Representative Quote: The NPS has trained me on how to use the native plants of the area. These plants are very important to native people. Colleagues of mine would contact developers to harvest everything they could before the bulldozers came in. Plants are my ohana - they have been a part of my life since I was a little girl.

Corr. ID: 65 Organization: Hawaii's Wilderness &

Wildlife Association

Representative Quote: As you might already know, hunting in Hawaii has declined over the years due to lands that are put into reserves and public lands not being able to restock its game management area's. It makes it very important and special to many of us that use hunting as a way of life. It's not all about taking a life of an animal but it also serves as part of our past culture and history. It's become part of a traditional way of life in Hawaii and it's slowly being taken away from us. Without these type's of programs our youth will gain no future knowledge in this area and eventually, hunting will be wiped out completely.

AE19000 - Affected Environment: Other Agencies' Land Use Plans

Concern ID: 17720

CONCERN Commenters suggested that Hawaii Volcanoes National Park should **STATEMENT:** consider actions taken by other land use agencies in the area, including

efforts by the State of Hawaii and other national parks.

Representative Corr. ID: 64 Organization: Not Specified

Quote(s):

Comment ID: 74718 Organization Type: Unaffiliated Individual

Representative Quote: Nonetheless, goats have been successfully eradicated by ground and aerial shooting in both HVNP and Haleakala National Park. Pigs (a more difficult species to control) have also been eradicated from several fenced portions of both HALE and HVNP. New types of environmentally safe toxic baits are being developed in Australia that could prove useful in Hawaii and should be explored because they could be much more cost effective than shooting. Research on such baits should be actively supported by the NPS. Helicopter shooting and especially Snaring are known to be very efficient also and should also be used where necessary.

Corr. ID: 75 Organization: Not Specified

Comment ID: 75052 Organization Type: Unaffiliated Individual

Representative Quote: This is a great opportunity to confront conflicting land use values in a constructive manner. A model of how this may be done, the "NAWG process" was developed on the Island of Hawai'i in response to conflict over pig fencing in the Pu'u O umi and Laupahoehoe NARs. I've enclosed references available on-line that describe what occurred over ten years ago regarding the same issues. In the NAWG process diverse and conflicting points- of- view regarding ungulate management were confronted, discussed and a series of recommendations to the State Legislature was generated by the group. I am sure the park staff is aware of the State of Hawaii pig management and is in contact with the many people involved in the NARs and historically in the NAWG process. It may seem expedient for the park to only be concerned with resource management within its own boundaries, however the long term success of the park's management does depend on the support of the local community and thus must address resource management issues across the island.

AE2000 - Affected Environment: Soils

Concern ID: 17721

CONCERN One commenter stated that soil erosion can result from digging by pigs, **STATEMENT:** which can in turn decrease the likelihood of vegetation recovery.

Representative Corr. ID: 89 Organization: Not Specified

Quote(s):

Comment ID: 75566 Organization Type: Unaffiliated Individual Representative Quote: A few more words are in order about ungulate

Representative Quote: A few more words are in order about ungulate impact, derived from personal, professional observation over several decades. In the early 1970's, goats and pigs were common in HAVO's Mauna Loa Strip. The high montane and subalpine communities were suffering from severe soil erosion, due mostly to the digging of pigs. I saw many instances of deep volcanic ash soil eroding rapidly and washing away. Once the apron of ash soil was widespread, especially in the older kipuka, but now it is only fragmentary. I witnessed the latter stages of this loss and was saddened as I watched many sites with their deep ash soil washing away. The degree of post- ungulate recovery is now truncated, the real loss permanent. Over the last few years I have seen similar erosion underway at equivalent but better- preserved Kapapala Forest Reserve, and huge amounts of it are washing off the mountain and into the sea during the periodic severe rainstorms

AE20000 - Affected Environment: Land Use

Concern ID: 17722

CONCERN Commenters expressed concern in a change of land uses from ranch lands

STATEMENT: to park service lands as part of a larger trend in land use in the state.

Representative Corr. ID: 75 Organization: Not Specified

Quote(s):

Representative Quote: The National Park staff is concerned mainly about what goes on within the boundaries of the park and also sees its mission as providing refuge for endangered species from more widespread threats. The local community expresses it fears and frustrations about trends and issues occurring over the entire Island of Hawai'i. The local community is also concerned about the interaction of a wide variety of issues which seem to be beyond the expressed scope and mission of the National Park. There is a trade- off between management of particular land parcels focused on conservation of biodiversity and management focused on the provision of the community with local sources of protein. This includes management of game animals but also the transformation of beef cattle ranchland into

National Park.

AE21000 - Affected Environment: Socioeconomics

Concern ID: 17723

CONCERN Commenters stated the importance of ungulates as food resources to lower

STATEMENT: income families.

Representative Corr. ID: 8 Organization: Not Specified

Quote(s):

Comment ID: 74772 Organization Type: Unaffiliated Individual

Representative Quote: Ranchers, people living near Kahuku, and cowboys use to support their lives. Now they can't make enough off just

cattle.

Corr. ID: 54 Organization: Not Specified

Comment ID: 74999 Organization Type: Unaffiliated Individual Representative Quote: Kahuku - workers get little pay. They use goats

and sheep to support their income.

AE23000 - Affected Environment: Native Hawaiians

Concern ID: 17724

CONCERN Commenters noted the role of native Hawaiians in resource management **STATEMENT:** and felt that some ungulate species, and the ability to hunt these species,

and felt that some ungulate species, and the ability to hunt these species, are valued as part of their cultural heritage. Commenters were concerned

that this part of their heritage would disappear.

Representative Corr. ID: 17 Organization: Not Specified

Quote(s):

Comment ID: 74976 Organization Type: Unaffiliated Individual

Representative Quote: We don't want to upset locals with eradication cowboys and fisherman use these resources. Cowboys work from the ocean all the way up to the mountains and take care of things.

Corr. ID: 24 **Organization:** Not Specified

Comment ID: 74852 Organization Type: Unaffiliated Individual

Representative Quote: I am a subsistence hunter, and was once a commercial fisherman. I'm tired of the ocean because of the rules, and I am also concerned about the food. I know plants and birds; I've seen them all. The volcano is going to take over the park anyway; Hawaiian families own this land, not the park. Hunters, environmentalists, and the Sierra Club all want to play god, but these guys don't. Outside people have taken jobs, etc. Locals being blamed for things that outsiders took or did.

Corr. ID: 34 **Organization:** Not Specified

Comment ID: 74782 Organization Type: Unaffiliated Individual

Representative Quote: Need access for hunters.

Hunting is a cultural thing

Make more areas where we can hunt and large areas for safety.

Hunting is family time for some families

Corr. ID: 78 Organization: Not Specified

Comment ID: 75021 **Organization Type:** Unaffiliated Individual Representative Quote: Preservation of Kahuku Ranch as an extension of the National Park would therefore include the Kamaaina culture and Paniolo lifestyle of allowing game mammals to co- exist with the native fauna and flora. Hunting of these animals was a means of adding variety to the Kahuku Ranch food source as well as culling as a means of controlling animal overpopulation. Continuing the Hawaiian heritage would therefore mean a continuation of the hunting of the pigs, goats and sheep of Kahuku

Ranch. Corr. ID: 85 **Organization:** Not Specified

Comment ID: 75341 **Organization Type:** Unaffiliated Individual

Representative Ouote: When the first human explorers arrived to this island, they discovered lowland and upland forests, bogs, deserts, valleys and snow-capped volcanic summits. These wild lands were thriving habitat for birds, insects, and marine creatures that arrived here by the natural forces of the wind ocean currents. They adapted to co- exist with each other and to flourish.

Corr. ID: III **Organization:** Not Specified

Comment ID: 76826 **Organization Type:** Unaffiliated Individual Representative Quote: In addition, the role of the pua'a (pig) in Hawaiian culture and society should be adequately articulated, especially for cultural practices, ceremonial use, and subsistence.

Concern ID:

17726

CONCERN STATEMENT:

Commenters stated that as native Hawaiians, they would like to be more involved in resource management, and would like to ensure that their

values are taken into account.

Representative Quote(s):

Corr. ID: 4 Organization: Hawaii Hunter Education

Program

Organization Type: Unaffiliated Individual Comment ID: 74744

Representative Quote: The National Parks belong to everyone in the

nation, but especially to the Hawaiian people.

These people's wishes need to carry a lot of weight in your decision making process. Too many times the federal government chooses not involve the local people in an important resource decison. Please don't make that mistake with this proposal.

Corr. ID: 65 Organization: Hawaii's Wilderness &

Wildlife Association

Comment ID: 74703 Organization Type: Unaffiliated Individual

Representative Quote: Many of us believe that the only way to prevent take over by environmental groups is to manage these areas ourselves as caretakers of our land. From the mountain to the ocean our ancestor's knew how to manage their resources. We too must learn to manage these resources and prevent damage to our environment by balancing the equation between plant and animal life.

AE24000 - Affected Environment: Water Quality

Concern ID: 17727

CONCERN Commenters stated that they are concerned about ungulate impacts to the

water quality in the area as a result of vegetation impacts. **STATEMENT:** Corr. ID: 22 **Organization:** Not Specified Representative

Quote(s):

Comment ID: 74931 **Organization Type:** Unaffiliated Individual

Representative Quote: I'm concerned about the domino effect:

destruction of flora by animals affects the watershed. I'm arguing to protect and this plan will help. Without plants to help trap water, it will flow right

down the mountain

Corr. ID: 38 Organization: Not Specified

Comment ID: 74929 **Organization Type:** Unaffiliated Individual

Representative Ouote: Water resources of kau are legendary. This resource could be threatened. Source of freshwater in mountains must be

protected.

AE9000 - Affected Environment: Vegetation

Concern ID: 17728

CONCERN Commenters stated that ungulates impact native vegetation, leading to a decline and loss of native vegetative cover, and increasing the number of **STATEMENT:**

> weeds such as strawberry guava. Commenters further stated that ungulate removal via hunting and/or fencing is critical to vegetation restoration.

Representative

Organization: *Not Specified* Corr. ID: 19

Quote(s):

Comment ID: 75005 Organization Type: Unaffiliated Individual Representative Quote: The Mauna Loa forest strip has grown back over the years, while outside the boundaries trees are gone. This tells a story

about the amount of pasture compared to the amount of forest. Organization: Not Specified Corr. ID: 63

Comment ID: 74724 Organization Type: Unaffiliated Individual

Representative Quote: I read a survey that was done on 12,000 acres of forest above Hilo. It was first surveyed about 30 years ago, and was found to be a pristine koa forest. The recent survey found the entire area trashed

by pigs and the strawberry guava that they spread.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75554 Organization Type: Unaffiliated Individual Representative Quote: The consequences to native ecosystems at HAVO were devastating in the areas with the greatest exposures to ungulates.

Corr. ID: 89 Organization: Not Specified

Comment ID: 75553 Organization Type: Unaffiliated Individual Representative Quote: This resulted in the decline and disappearance of many species of native plants and animals, both directly and by the consequences of ungulate- enhanced alien plant invasion. While habitat degradation can be stopped, stabilized and improved upon removal of ungulates, the loss and serious decline of most species from the areas tends to be a permanent form of degradation. This latter is the situation that exists at the Kahuku section of HAVO today.

Corr. ID: 105 Organization: The Nature Conservancy
Comment ID: 76615 Organization Type: Non-Governmental
Representative Quote: The forest understory in the Park and the Forest
Reserve has suffered serious damage due to browsing and rooting by pigs
and mouflon sheep. Non- native, invasive plants are moving quickly to fill
the void

Concern ID: 17857

CONCERN Commenters noted the role of ungulates in the environment in maintaining

STATEMENT: the forest and controlling vegetation.

Representative Corr. ID: 7 Organization: Not Specified

Ouote(s):

Comment ID: 74759 Organization Type: Unaffiliated Individual

Representative Quote: Sure, pigs in a forest rut and eat fruits, etc. Some

plants they don't touch. Pigs fix the forest.

Corr. ID: 29 Organization: Not Specified

Comment ID: 74822 Organization Type: Unaffiliated Individual Representative Quote: Puuwaaua Ranch- cycle of cattle in and out of the

ranch helps Koa establish, and keep grass controlled.

CC1000 - Consultation and Coordination: General Comments

Concern ID: 17729

CONCERN Commenters stated that NPS should consult with outside land managers, STATEMENT: the State of Hawaii, Division of Forestry and Wildlife, Aquatic Life and

Wildlife Advisory Committee, hunting organizations, local community, and local hunters to include their views and knowledge and maximize the

benefits of resource planning.

Representative Corr. ID: 68 Organization: Hawaii Island Game

Quote(s): Management Plan Working Group

Representative Quote: With Kahuku Ranch the Park Service has the opportunity to be more culturally sensitive and accountable not only to the native Hawaiian peoples' past but to the people who live contemporaneously with the Park. It is vital for the Park Service to work closely with the State of Hawaii, Division of Forestry and Wildlife, its Aquatic Life and Wildlife Advisory Committee, and hunting organizations to develop a plan to use the wildlife resources not only within the Park but also in adjacent or nearby public hunting areas.

Corr. ID: 72 Organization: Not Specified

Comment ID: 75124 Organization Type: Unaffiliated Individual Representative Quote: It would be very good for Hawaii's future if other public and private land managers would work cooperatively with the Park in this effort, to maximize the benefit of this type of planning and begin to reduce the dollar and environmental costs resulting from introduced game mammals in inappropriate locations. Native species and the overall quality of land and water would benefit greatly from a comprehensive plan for proper hands- on management and control of all ungulate across all land ownerships, on every island.

Corr. ID: 75 Organization: Not Specified

Comment ID: 75053 **Organization Type:** Unaffiliated Individual **Representative Quote:** The park may seek advice on how to best reduce ungulate populations but what really will make a difference is community involvement in the setting of management objectives across institutional property boundaries. It concerned me at the meeting that multiple generations of hunters are being raised with an adversarial relationship to biodiversity management.

CR1000 - Cultural Resources: Guiding Policies, Regs and Laws

Concern ID: 17730

CONCERN Commenters stated that the park must adhere to section 106 of the **STATEMENT:** National Historic Preservation Act while preparing the plan/EIS.

Representative Quote(s):

Corr. ID: 79 Organization: Office of Hawaiian Affairs,

Department of Land and Natural Resources
Organization Type: State Government

Comment ID: 75379 Organization Type: State Government

Representative Quote: Furthermore, this submission to our office does not constitute a proper Section 106 consultation according to the National Historic Preservation Act of 1966, Section 106 and its implementing regulations, 36 CFR 800. According to \$800.11, documentation standards for proper consultation include a description of the undertaking, the specific accepting federal agency, a determination of the Area of Potential Effect (APE), and photographs, maps, drawings, ect.

We look forward to receiving an official Section 106 consultation letter in order to complete proper consultation as afforded by \$800.2(c)(2), Consultation on historic properties of significance to Indian tribes and Native organizations. The Act, Section 301 (18) names OHA as an official native Hawaiian organization. In order for proper consultation between

NPS and OHA to be conducted, proper documentation standards must be adhered to.

CR2000 - Cultural Resources: Methodology and Assumptions

Concern ID: 17731

CONCERN Commenters stated that cultural preservation areas should only include

STATEMENT: pigs, not other introduced ungulates.

Representative Corr. ID: 101 Organization: Not Specified

Quote(s):

Ouote(s):

Comment ID: 76127 Organization Type: Unaffiliated Individual Representative Quote: In terms of cultural practices, since Polynesian introductions included only pigs, I think it would be reasonable for any area of cultural preservation to include only pigs and not the ungulates

introduced by Europeans and North Americans.

CR4000 - Cultural Resources: Impact of Proposal and Alternatives

Concern ID: 17888

CONCERN One commenter suggested conducting a comprehensive archaeological STATEMENT: survey and stated that if cultural items are found, project activities must

cease and the appropriate agency must be contacted.

Representative Corr. ID: 79 Organization: Office of Hawaiian Affairs,

Department of Land and Natural Resources

Comment ID: 75377 Organization Type: State Government

Representative Quote: OHA is concerned with any destructive methods of ungulate control that would endanger any cultural and natural resources. Methods such as fencing, which would include ground disturbance, could directly impact any historic site that may lie in its

location.

OHA requests that a comprehensive archaeological inventory for the proposed project area to be conducted and submitted to the Department of Land and Natural Resources- Historic Preservation Division for review and approval. OHA should be allowed the opportunity to comment on the criteria assigned to any cultural or archaeological sites identified within the archaeological inventory survey. Consideration must also be afforded to any individuals accessing the project are for constitutionally protected traditional and customary purposes, in accordance with Hawaii State Constitution, Article XII, section 7.

We request the applicants assurances that should iwi kupuna or Native Hawaiian cultural or traditional deposits be found during the construction of the project, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

GA1000 - Impact Analysis: Impact Analyses

Concern ID: 17732

CONCERN Commenters stated that they would like to see studies on areas in which

STATEMENT: ungulates have been eradicated. One commenter disagreed with

eradication efforts, stating that ungulate impacts have been overstated.

Representative Ouote(s):

Corr. ID: 9 Organization: Not Specified

Comment ID: 74776 Organization Type: Unaffiliated Individual Representative Quote: All of the pictures I've seen are 30 years old. I want to see recent pictures and research on areas where pigs have been

eradicated - pigs, sheep and goats.

Corr. ID: 68 Organization: Hawaii Island Game

Management Plan Working Group

Comment ID: 74849 Organization Type: Unaffiliated Individual

Representative Quote: With the acquisition of Kahuku Ranch the Park Service may be planning another large effort to eradicate non native ungulates with the same faulty rationale they used to eradicate goats and attempted the eradication of wild pigs within HAVO. Some of this rationale can border on misinformation and propaganda. A display at the HAVO Visitors Center shows a dead iiwi next to a stuffed wild pig and a cartoon depicting a pile of dead birds due to mosquitoes that were the result of wild pigs eating hapuu and creating mosquito breeding conditions. Never mind the intrusion of hundreds of human habitations with water catchment systems, etc., into the forests of Puna, Kona and Kau. It seems that capable and competent scientists and managers who are stewards of the lands within the Park system would not have to resort to such deplorable propaganda to justify their otherwise honorable work.

NH3000 - Native Hawaiian: Impact of Proposal and Alternatives

Concern ID: 17733

CONCERN Commenters stated that impacts on native Hawaiian culture should be **STATEMENT:** assessed including hunting as a cultural practice and the use of ungulates as

a food source.

Representative

Quote(s):

Corr. ID: 15 Organization: Not Specified

Comment ID: 74815 Organization Type: Unaffiliated Individual Representative Quote: We have not talked about the impact that will be place upon the Hawaiians. My own daughter had to go to the mainland because she couldn't survive here. How many more natives will get

displaced?

Corr. ID: 41 Organization: Not Specified

Comment ID: 74763 Organization Type: Unaffiliated Individual Representative Quote: Someone spoke of preserving plants and animals as resources, and that the public can't go into the park to harvest endangered species. They are preserving more to say "we have this, we worked to save these plants and animals" but this doesn't put food on tables, or help the economy. It's more of a trophy. Native people can't use

because of protection. Glamorized about how much they are doing to

preserve, but who does it benefit?

Corr. ID: 73 Organization: Not Specified

Comment ID: 75108 Organization Type: Unaffiliated Individual Representative Quote: The feral and mouflon sheep, goats, and wild pigs have been here for decades & don't forget, they were introduced by the white men (Haoles). Today, these ungulates provide a food source for many local hunters. A lot of hunters depend on the meat to feed their families. Now you want to change that.

Corr. ID: III Organization: Not Specified

Comment ID: 76823 Organization Type: Unaffiliated Individual

Representative Quote: The proposed EIA should include a

comprehensive impacts assessment that addresses the potential impacts to Native Hawaiian cultural practices, beliefs, and resources, past and current,

that are associated with the project area.

PN3000 - Purpose and Need: Scope of the Analysis

Concern ID: 17734

CONCERN One commenter requested the NPS consider the precedent that would be

STATEMENT: set from the implementation of the Plan/EIS.

Representative Corr. ID: 16 Organization: Not Specified

Quote(s):

Comment ID: 74816 Organization Type: Unaffiliated Individual Representative Quote: Management of ungulates, including eradication, sets a precedent. If the NPS is going to do it now, where will be next? It's important that if they set a precedent, they make sure it is good for

everyone, especially those that live here.

Concern ID: 17889

CONCERN Commenters felt that a plan/EIS was not needed and that management

STATEMENT: should continue under the 1974 EIS.

Representative Corr. ID: 100 Organization: Not Specified

Quote(s):

Comment ID: 76119 Organization Type: Unaffiliated Individual

Representative Quote: Unless the park is contemplating changes in its efforts to control ungulates, I feel it is unnecessary for the park to prepare a new EIS regarding ungulate control in the park. My understanding of NEPA is that an EA or an EIS is required to do something new or different-but not to carry out an endeavor that has been long underway and itself

subject to an earlier EIS.

Corr. ID: 100 Organization: Not Specified

Comment ID: 76121 Organization Type: Unaffiliated Individual Representative Quote: I'd prefer the park cease preparing a new EIS on this matter and continue your existing practices regarding ungulates as outlined in the 1974 EIS, Protect Native Ecosystems in Hawaii Volcanoes

National Park.

PN6000 - Purpose and Need: Land Management Laws, Exec Orders

Concern ID: 17735

CONCERN Commenters stated that the NPS should comply with State of Hawaii

STATEMENT: permit requirements under Section 13-123-9.

Representative Corr. ID: 68 Organization: Hawaii Island Game Quote(s):

Management Plan Working Group

Comment ID: 74864 Organization Type: Unaffiliated Individual Representative Quote: The federal government (i.e. NPS), should honor the Constitutional right of the State of Hawaii to manage resident wildlife and the NPS should be subject to permit requirements under Section 13-123-9 of Hawaii Administrative Rules (HAR), in order to control mouflon and all other game species (HAR Section 13-123-11) within their borders.

Concern ID: 17736

CONCERN Commenters stated that NPS should follow NPS Management Policies

STATEMENT: 2006, section 4.4.4, which states that non- native species will not be

allowed to displace native species.

Representative

Corr. ID: 64

Organization: Not Specified

Quote(s):

Organization Type: Unaffiliated Individual Comment ID: 74717 Representative Quote: I appreciate this opportunity that the National Park Service has given to the public to comment on the Non- native Ungulate Management Plan for Hawaii Volcanoes National Park. However, the mandate of the NPS in this regard is made clear in NPS Management Policies 2006 4.4.4, in which it is stated that "non- native species will not be allowed to displace native species if displacement can be

prevented".

PO1000 - Park Operations: Guiding Policies, Regs and Laws

Concern ID:

CONCERN Commenters stated that ungulate management is a vital part of the NPS

STATEMENT: mission statement.

Representative Corr. ID: 106 **Organization:** Not Specified

Quote(s):

Comment ID: 76805 **Organization Type:** Unaffiliated Individual Representative Quote: Control/eradication of feral, sheep, goat, and

mouflan on NPS lands for native resource protection is a vital part of NPS

mission statement

Concern ID: 17740

CONCERN One commenter stated that NPS shall not take any living creature unless it

STATEMENT: is a danger to humans, as per Title 16 of the US Code. Representative Corr. ID: 9 **Organization:** Not Specified

Quote(s):

Comment ID: 74775 Organization Type: Unaffiliated Individual Representative Quote: I agree with the other guys, and I would like to add this state and federal law: Title 16 of US Code - The NPS shall not kill, injure, or harm, any living creature in park unless danger to humans.

PO3000 - Park Operations: Study Area

Concern ID: 17741

CONCERN One commenter stated that NPS has a new management challenge with the

STATEMENT: addition of lands at Kahuku, which are part of the study area.

Representative Corr. ID: 104 Organization: Not Specified

Quote(s):

Comment ID: 76604 Organization Type: Unaffiliated Individual Representative Quote: With the recent addition of the lands of Kahuku, the park has stepped up to a renewed round of challenges for these rich

and diverse 115,000 acres.

PO4000 - Park Operations: Impact of Proposal and Alternatives

Concern ID: 17742

CONCERN Commenters expressed concern about park operation and maintenance **STATEMENT:** expenses including the cost to remove weeds and operate helicopters.

Some commenters stated that using hunting for ungulate management

would be the most cost effective solution.

Representative

Corr. ID: 48 Organization: Not Specified

Quote(s):

Comment ID: 74953 Organization Type: Unaffiliated Individual Representative Quote: It is a waste of money to pay people to weed- eat

these areas.

Corr. ID: 52 Organization: Not Specified

Comment ID: 74932 Organization Type: Unaffiliated Individual

Representative Quote: Helicopters are expensive to operate.

Have you looked at how much (overall costs) this will cost the public?

Corr. ID: 67

Organization: National Wild Turkey

Federation

Comment ID: 74835 Organization Type: Unaffiliated Individual

Representative Quote: Managing the feral ungulates in the park through a hunting program can control the numbers to a reasonable level for a lot less cost. Given the current situation for all resource management agenices, I imagine anything to reduce adminstrative costs to be a plus. (I work for NOAA and am familiar un-funded and under-funded manadates)

TE4000 - Threatened and Endangered Species: Impact of Proposal and Alternatives

Concern ID: 17744

CONCERN Commenters stated that removal of ungulates would enhance recovery of

STATEMENT: listed species.

Representative

Quote(s):

Corr. ID: 112 Organization: U.S. Fish & Wildlife Service

Representative Quote: According to our records, at least 36 federally listed threatened or endangered taxa occur in, or in close proximity to the Park (See Table 1) and there is federally designated critical habitat for 14 taxa within the park (see Table 2). Undoubtedly, most, if not all, of these taxa would benefit from ungulate exclosure and removal.

VE4000 - Visitor Experience: Impact of Proposal and Alternatives

Concern ID: 17746

CONCERN One commenter felt that habitat improvement for endangered birds would

STATEMENT: improve the visitor experience for some visitors.

Representative Corr. ID: 88 Organization: Not Specified

Quote(s):

Comment ID: 75552 **Organization Type:** Unaffiliated Individual **Representative Quote:** I am also struck by the potential for improving bird populations in the park. My college project was on the 'Oma'o, our Hawaiian Thrush. At the time, I only found this bird in the rainforest sections (e.g., Thurston Lava Tube) of the Park and high above timberline on Mauna Loa. Now the thrush has moved into kipukas Puaulu and Ki and the lower sections of the Mauna Loa Strip where they didn't used to be in the early 1970s. The new expanse of forest on Mauna Loa Strip is now thick with 'Elepaio and nonendangered forest birds. The habitat there looks

good enough for some of the endangered species.

VG3000 - Vegetation: Cumulative Impacts

Concern ID: 17747

CONCERN One commenter stated that conservation of native species in the park is **STATEMENT:** important because so much of the island is degraded and unprotected.

Representative Corr. ID: 101 Organization: Not Specified

Quote(s):

Representative Quote: Lastly, in attempting to develop an ungulate management plan I think it is important to consider the cumulative or island- wide perspective. Hawaii Volcanoes National Park (HAVO) makes up about 14% of the Big Island's land, and of that 14% most of the area is composed of recent lava flows that contain little or no vegetation. Thus the vegetated areas of HAVO constitute only about 4% of the land on the Big

Island. Nonetheless, this small area contains tremendous ecological diversity, unique assemblages of native species, and numerous endangered plants and birds. I would argue that from a cumulative perspective it is vitally important to preserve the native resources of these limited but invaluable vegetated areas, especially since so much of the forest and shrubland on the Big Island is unprotected and degraded.

VG5000 - Vegetation: Impact of the Proposal and Alternatives to Weeds and Non-Native Species

Concern ID: 17748

CONCERN Commenters stated that ungulates facilitate the spread of weeds.

STATEMENT:

Representative Corr. ID: 18 Organization: Not Specified

Quote(s):

Comment ID: 74917 Organization Type: Unaffiliated Individual Representative Quote: Disturbance in ground cover allows weeds to move in, and after a few decades, the forest will lose a lot of the components of the native forest, even if you still have the trees.

Corr. ID: II2 Organization: U.S. Fish & Wildlife Service
Comment ID: 76863 Organization Type: Federal Government
Representative Quote: . In addition to destroying native understory plants by browsing, trampling and rooting, ungulates facilitate invasion by

noxious weeds.

VG6000 - Vegetation: Impact of the Proposal and Alternatives on the Fire Regime

Concern ID: 17749

CONCERN One commenter stated that weeds create a fire hazard and ungulates are

STATEMENT: important at preventing this hazard by grazing on weeds.

Representative Corr. ID: 55 Organization: Not Specified

Quote(s):

Comment ID: 74963 Organization Type: Unaffiliated Individual Representative Quote: The problem is that weeds grow and create a fire

hazard. Hilina Pali - removed goats and now they have had fires.

VN100 - VALUES - Value the natural resources or setting (flora, fauna, views, natural quiet, undeveloped areas)

Concern ID: 17750

CONCERN Commenters stated that they value natural resources such as native plants, **STATEMENT:** and that removing ungulates is important to preserve natural heritage.

Representative Corr. ID: 90 Organization: Not Specified

Quote(s):

Comment ID: 75573 Organization Type: Unaffiliated Individual

Representative Quote: Removing mouflon from Kahuku is necessary to preserve our natural heritage, and I encourage NPS to take strong, effective measures to eliminate the scourge of alien browsers as quickly as possible.

WH3000 - Wildlife and Wildlife Habitat: Study Area

Concern ID: 17751

CONCERN Commenters stated that the evaluation of wildlife impacts should include

STATEMENT: further study of the birds in the area.

Representative Corr. ID: 42 Organization: Not Specified

Quote(s):

Comment ID: 74924 Organization Type: Unaffiliated Individual Representative Quote: Need more research to determine why forest birds aren't doing well. How do you know its pigs and not something else?

Corr. ID: 52 Organization: Not Specified

Comment ID: 74933 Organization Type: Unaffiliated Individual Representative Quote: Study that birds at Mauna Kea are not doing well because they pick seeds from the ground and grass is too tall to do so.

WH4000 - Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives

Concern ID: 17893

CONCERN Commenters suggested possible impacts of the proposal and alternatives

STATEMENT: on wildlife of the park and surrounding areas.

Representative Corr. ID: 55 Organization: Not Specified

Quote(s):

Comment ID: 74957 Organization Type: Unaffiliated Individual Representative Quote: I think that the Park needs to be aggressive in its protection of native bird species who will likely face increased disease

protection of native bird species who will likely face increased disease threats as climate change progresses. Time is of the essence in addressing the clear link between ungulates and evian disease.

the clear link between ungulates and avian disease.

Corr. ID: 68 Organization: Hawaii Island Game

Management Plan Working Group

Comment ID: 74841 Organization Type: Unaffiliated Individual

Representative Quote: Each species must be managed differently, but it seems that even if the Park Service had inadvertently left a small herd of goats in the lowlands of HAVO, AND properly managed and culled that herd, it could not be a threat to native ecosystems in part because a small remnant herd would have virtually no effect to the lowland ecosystems, and more importantly even without goats the lowland ecosystem is no longer native.

Corr. ID: 88 Organization: Not Specified

Comment ID: 75552 Organization Type: Unaffiliated Individual

Representative Quote: As a bird lover and wildlife biologist, it is apparent to me that the park holds some key forest bird realestate. The Kahuku-HAVO/Kau Forest Reserve is the largest continuous expanse of native rainforest in the State, and the results of bird surveys tell us that the forest bird community there is second only to Hakalau Forest Natl Wildlife

Refuge and neighboring lands. Kahuku/Kau offers one of the best chances in the State to save endangered forest birds and to provide in the long term for the more common native species as well. Exclusion of ungulates and reforestation at Hakalau has shown us that forest bird populations can be stabilized and increased in comparison to forest bird decreases and losses where ungulates continue to degrade habitat. A similar program of ungulate exclusion at Kahuku/Kau could yield stunning results.

WH5000 - Wildlife and Wildlife Habitat: Cumulative Impacts

Concern ID: 17752

CONCERN One commenter stated that pig migration should be monitored as

STATEMENT: increased increasing development causes the pigs to move into other areas

and create problems.

Representative Quote(s):

Corr. ID: 42 Organization: Not Specified

Comment ID: 74923 Organization Type: Unaffiliated Individual

Representative Quote: Need to monitor pig migration to see how management of pigs might affect outside areas in park where public have

access to hunt.

Increased human (urban) development has caused pigs to move into other

areas and cause problem where before they were not

Concern ID: 17861

CONCERN Commenters stated that there are other things impacting native species

STATEMENT: beyond ungulates including feral cats.

Representative Corr. ID: 38 Organization: Not Specified

Quote(s):

Comment ID: 74930 Organization Type: Unaffiliated Individual Representative Quote: Nobody has mentioned feral cats. One million

feral cats on the island. A major reason the bird population is threatened is

feral cats. Keep it up complete control.

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| | II:: I-1 1 C | 68 | AC1000 | General Comments Alternative Concepts: Eradication of |
| | Hawaii Island Game Management Plan Working Group | 00 | ACIOOO | Ungulates |
| | original croup | | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | CC1000 | Consultation and Coordination: General Comments |
| | | | GA1000 | Impact Analysis: Impact Analyses |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|--|----------------|---------|--|
| | | | PN6000 | Purpose and Need: Land Management Laws, Exec Orders |
| | | | VG2000 | Vegetation: Impact of Proposal and Alternative Concepts |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | Hawaii's Wilderness & Wildlife Association | 65 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC7000 | Alternative Concepts: Fire Management |
| | | | AC9000 | Alternative Concepts: Capture and Relocation |
| | | | AE13000 | Affected Environment: Cultural Resources |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | National Wild Turkey Federation | 50 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | rederation | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AC9000 | Alternative Concepts: Capture and Relocation |
| | | 67 | AC100 | Alternative Concepts: New Alternatives or Elements |
| | | | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | PO4000 | Park Operations: Impact of Proposal and Alternatives |
| | USGS- PIERC | 82 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | N/A | I | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | 2 | АСнооо | Alternative Concepts: Reproductive Control |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 3 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | 5 | AC4000 | Alternative Concepts: Restoration of Vegetation |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|---|
| | | | АЕнооо | Affected Environment: Species of Special Concern |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | 6 | PO4000 | Park Operations: Impact of Proposal and Alternatives |
| | | 7 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | | AE9000 | Affected Environment: Vegetation |
| | | 8 | ACioo | Alternative Concepts: New Alternatives or Elements |
| | | | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AE21000 | Affected Environment: Socioeconomics |
| | | | AE22000 | Affected Environment: Visitor Use |
| | | 9 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | АСпооо | Alternative Concepts: Reproductive Control |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC6ooo | Alternative Concepts: Weed Control |
| | | | AC7000 | Alternative Concepts: Fire Management |
| | | | GA1000 | Impact Analysis: Impact Analyses |
| | | | РО1000 | Park Operations: Guiding Policies, Regs and Laws |
| | | | VG5000 | Vegetation: Impact of the Proposal and Alternatives to Weeds and Non- Native Species |
| | | Ю | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC6ooo | Alternative Concepts: Weed Control |
| | | | AC8000 | Alternative Concepts: Weed Control Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|---|
| | | | AE21000 | Affected Environment: |
| | | | | Socioeconomics |
| | | | NH3000 | Native Hawaiian: Impact of Proposal and Alternatives |
| | | | PN3000 | Purpose and Need: Scope of the Analysis |
| | | | VG2000 | Vegetation: Impact of Proposal and Alternative Concepts |
| | | | WH1000 | Wildlife and Wildlife Habitat: Guiding Policies, Regs and Laws |
| | | II | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | NH3000 | Native Hawaiian: Impact of Proposal and Alternatives |
| | | | VG2000 | Vegetation: Impact of Proposal and Alternative Concepts |
| | | | VG5000 | Vegetation: Impact of the Proposal and Alternatives to Weeds and Non- Native Species |
| | | I2 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC6ooo | Alternative Concepts: Weed Control |
| | | | PN8000 | Purpose and Need: Objectives in Taking Action |
| | | 13 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | 14 | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 15 | AE13000 | Affected Environment: Cultural Resources |
| | | | NH3000 | Native Hawaiian: Impact of Proposal and Alternatives |
| | | | VN100 | VALUES - Value the natural resources or setting (flora, fauna, views, natural quiet, undeveloped areas) |
| | | 16 | PN3000 | Purpose and Need: Scope of the Analysis |
| | | 17 | ACioo | Alternative Concepts: New Alternatives or Elements |
| | | | AC13000 | Alternative Concepts: Fencing |
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC6000 | Alternative Concepts: Weed Control |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|--|
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | | VG2000 | Vegetation: Impact of Proposal and Alternative Concepts |
| | | 18 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | АС10000 | Alternative Concepts: Direct Reduction |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | VG5000 | Vegetation: Impact of the Proposal and Alternatives to Weeds and Non- Native Species |
| | | 19 | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | AE9000 | Affected Environment: Vegetation |
| | | | PN8000 | Purpose and Need: Objectives in Taking Action |
| | | 20 | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | VG5000 | Vegetation: Impact of the Proposal and Alternatives to Weeds and Non- Native Species |
| | | 2I | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | 22 | AE24000 | Affected Environment: Water Quality |
| | | 23 | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 24 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | | AE24000 | Affected Environment: Water Quality |
| | | | VG3000 | Vegetation: Cumulative Impacts |
| | | 25 | ACiooo | Alternative Concepts: Eradication of Ungulates |
| | | | АЕнооо | Affected Environment: Species of Special Concern |
| | | | CR2000 | Cultural Resources: Methodology and Assumptions |
| | | | TE5000 | Threatened and Endangered Species: Cumulative Impacts |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|-------------------|--|
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 26 | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC6ooo | Alternative Concepts: Weed Control |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 27 | AC100 | Alternative Concepts: New Alternatives or Elements |
| | | | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 28 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 29 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | AE9000 | Affected Environment: Vegetation |
| | | 30 | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 31 | AC13000 AC8000 | Alternative Concepts: Fencing Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 32 | AC6000 | Alternative Concepts: Weed Control |
| | | | AC7000 | Alternative Concepts: Fire Management |
| | | 33 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC13000 | Alternative Concepts: Fencing |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 34 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|-------------------|--|
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | 36 | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 37 | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 38 | AE24000 WH5000 | Affected Environment: Water Quality Wildlife and Wildlife Habitat: Cumulative Impacts |
| | | 39 | ACioo | Alternative Concepts: New Alternatives or Elements |
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | 40 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC9000 | Alternative Concepts: Capture and Relocation |
| | | 4 I | AC15000 | Alternative Concepts: Education and Outreach |
| | | | NH3000 | Native Hawaiian: Impact of Proposal and Alternatives |
| | | 42 | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | TE2000 | Threatened and Endangered Species: Methodology and Assumptions |
| | | | WH3000 | Wildlife and Wildlife Habitat: Study Area |
| | | | WH5000 | Wildlife and Wildlife Habitat: Cumulative Impacts |
| | | 43 | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC7000 | Alternative Concepts: Fire Management |
| | | 44 | AC100 | Alternative Concepts: New Alternatives or Elements |
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | 45 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|--|
| | | 46 | VU4000 | Visitor Use: Impact of Proposal and Alternatives |
| | | 47 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | 48 | AC100 | Alternative Concepts: New Alternatives or Elements |
| | | | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC7000 | Alternative Concepts: Fire Management |
| | | | AE9000 | Affected Environment: Vegetation |
| | | | PO4000 | Park Operations: Impact of Proposal and Alternatives |
| | | 49 | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 51 | AC12000 | Alternative Concepts: Combination of Management Approaches |
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | 52 | AE9000 | Affected Environment: Vegetation |
| | | | PO4000 | Park Operations: Impact of Proposal and Alternatives |
| | | | WH3000 | Wildlife and Wildlife Habitat: Study Area |
| | | | AC13000 | Alternative Concepts: Fencing |
| | | 53 | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|---|
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 54 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AE21000 | Affected Environment: Socioeconomics |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | | AE9000 | Affected Environment: Vegetation |
| | | 55 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | | VG6000 | Vegetation: Impact of the Proposal and Alternatives on the Fire Regime |
| | | | VN100 | VALUES - Value the natural resources or setting (flora, fauna, views, natural quiet, undeveloped areas) |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 56 | ACioo | Alternative Concepts: New Alternatives or Elements |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | PN8000 | Purpose and Need: Objectives in Taking Action |
| | | 57 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 58 | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 60 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | PN8000 | Purpose and Need: Objectives in Taking Action |
| | | 61 | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | 62 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AE20000 | Affected Environment: Land Use |
| | | 63 | AC1000 | Alternative Concepts: Eradication of Ungulates |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|--|
| | | | AC9000 | Alternative Concepts: Capture and Relocation |
| | | | AE9000 | Affected Environment: Vegetation |
| | | 64 | AC13000 | Alternative Concepts: Fencing |
| | | ~ 4 | AC3000 | Alternative Concepts: Professional |
| | | | AC8000 | Hunting Alternative Concepts: Use of Local Volunteers for Ungulate Management |
| | | | AE19000 | (with NPS staff) Affected Environment: Other Agencies' Land Use Plans |
| | | | AE9000 | Affected Environment: Vegetation |
| | | | PN6000 | Purpose and Need: Land Management Laws, Exec Orders |
| | | 66 | AC13000 | Alternative Concepts: Fencing |
| | | 69 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 70 | ACioo | Alternative Concepts: New Alternatives or Elements |
| | | | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 7 ^I | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC12000 | Alternative Concepts: Combination of Management Approaches |
| | | | AC13000 | Alternative Concepts: Fencing |
| | | | AC9000 | Alternative Concepts: Capture and Relocation |
| | | 72 | CC1000 | Consultation and Coordination: General Comments |
| | | 73 | AC300 | Alternative Concepts: Oppose Ungulate Management |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | | NH3000 | Native Hawaiian: Impact of Proposal and Alternatives |
| | | 74 | AC100 | Alternative Concepts: New Alternatives or Elements |
| | | | АС1000 | Alternative Concepts: Eradication of Ungulates |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|--|
| | | | AC15000 | Alternative Concepts: Education and Outreach |
| | | | AC6000 | Alternative Concepts: Weed Control |
| | | | AC7000 | Alternative Concepts: Fire |
| | | | | Management |
| | | 75 | AE19000 | Affected Environment: Other Agencies' Land Use Plans |
| | | | AE20000 | Affected Environment: Land Use |
| | | | CC1000 | Consultation and Coordination: General Comments |
| | | | PN8000 | Purpose and Need: Objectives in Taking Action |
| | | | RF1000 | References: General Comments |
| | | | SE4000 | Socioeconomics: Impact of Proposal and Alternatives |
| | | 76 | ACıoo | Alternative Concepts: New |
| | | , | | Alternatives or Elements |
| | | | AC8000 | Alternative Concepts: Use of Local |
| | | | | Volunteers for Ungulate Management |
| | | | | (with NPS staff) |
| | | | NH3000 | Native Hawaiian: Impact of Proposal |
| | | | 1.0 | and Alternatives |
| | | 77 | AC13000 | Alternative Concepts: Fencing |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | 78 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | | CR4000 | Cultural Resources: Impact of Proposal and Alternatives |
| | | 8o | AC13000 | Alternative Concepts: Fencing |
| | | | AC200 | Alternative Concepts: Support |
| | | | | Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | 81 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC8000 | Alternative Concepts: Use of Local |
| | | | AC0000 | Volunteers for Ungulate Management (with NPS staff) |
| | | | | • |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|--|
| | | 83 | АСіоо | Alternative Concepts: New Alternatives or Elements |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | 84 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | PO5000 | Park Operations: Impacts |
| | | 85 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | 86 | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | АЕ10000 | Affected Environment: Rare or Unusual Vegetation |
| | | 87 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | 88 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | VE4000 | Visitor Experience: Impact of Proposal and Alternatives |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 89 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | АС10000 | Alternative Concepts: Direct Reduction |
| | | | AC13000 | Alternative Concepts: Fencing |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|-------------------|---|
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | АЕ10000 | Affected Environment: Rare or Unusual Vegetation |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | AE2000 | Affected Environment: Soils |
| | | | AE9000 | Affected Environment: Vegetation |
| | | | МТюоо | Miscellaneous Topics: General Comments |
| | | 90 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | VN100 | VALUES - Value the natural resources or setting (flora, fauna, views, natural quiet, undeveloped areas) |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 91 | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 92 | АС10000 | Alternative Concepts: Direct Reduction |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | МТ1000 | Miscellaneous Topics: General Comments |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 93 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | АЕ10000 | Affected Environment: Rare or Unusual Vegetation |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | WH4000 | Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | 94 | AC1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC13000 AC4000 | Alternative Concepts: Fencing Alternative Concepts: Restoration of Vegetation |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | AE9000 | Affected Environment: Vegetation |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|-------------------|---|
| | | | МТіооо | Miscellaneous Topics: General Comments |
| | | 95 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | 96 | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | МТюоо | Miscellaneous Topics: General Comments |
| | | 97 | ACioo | Alternative Concepts: New Alternatives or Elements |
| | | | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | | AE23000 | Affected Environment: Native Hawaiian |
| | | 98 | AC8000 | Alternative Concepts: Use of Local Volunteers for Ungulate Management (with NPS staff) |
| | | 99 | AC14000 | Alternative Concepts: Provide Access/Right- of- way through Park |
| | | 100 | AC300 | Alternative Concepts: Oppose Ungulate Management |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | PN3000 | Purpose and Need: Scope of the Analysis |
| | | IOI | AC13000 CR2000 | Alternative Concepts: Fencing Cultural Resources: Methodology and Assumptions |
| | | | PN8000 | Purpose and Need: Objectives in Taking Action |
| | | | VG3000 WH4000 | Vegetation: Cumulative Impacts Wildlife and Wildlife Habitat: Impact of Proposal and Alternatives |
| | | | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC13000 | Alternative Concepts: Fencing |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | VG2000 | Vegetation: Impact of Proposal and Alternative Concepts |
| | | 103 | АСіооо | Alternative Concepts: Eradication of Ungulates |
| | | | АС10000 | Alternative Concepts: Direct Reduction |
| | | | AC13000 | Alternative Concepts: Fencing |

| Organization Type | Organization Name | Corresp. | Code | Description |
|----------------------|-------------------|----------|---------|---|
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | AE10000 | Affected Environment: Rare or Unusual Vegetation |
| | | | AE12000 | Affected Environment: Wildlife and Wildlife Habitat |
| | | | AE9000 | Affected Environment: Vegetation |
| | | | МТ1000 | Miscellaneous Topics: General Comments |
| | | | TE5000 | Threatened and Endangered Species: Cumulative Impacts |
| | | | WH2000 | Wildlife and Wildlife Habitat: Methodology and Assumptions |
| | | | WH5000 | Wildlife and Wildlife Habitat: Cumulative Impacts |
| | | 104 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC10000 | Alternative Concepts: Direct Reduction |
| | | | АСнооо | Alternative Concepts: Reproductive Control |
| | | | AC13000 | Alternative Concepts: Fencing |
| | | | AC200 | Alternative Concepts: Support Ungulate Management |
| | | | AC4000 | Alternative Concepts: Restoration of Vegetation |
| | | | AC6ooo | Alternative Concepts: Weed Control |
| | | | AC9000 | Alternative Concepts: Capture and Relocation |
| | | | АЕ10000 | Affected Environment: Rare or Unusual Vegetation |
| | | | МТ1000 | Miscellaneous Topics: General Comments |
| | | | PO3000 | Park Operations: Study Area |
| | | 106 | ACiooo | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | | РО1000 | Park Operations: Guiding Policies, Regs and Laws |
| | | 107 | AC1000 | Alternative Concepts: Eradication of Ungulates |

| Organization Type | Organization Name | Corresp. ID | Code | Description |
|----------------------|-------------------|----------------|---------|---|
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | РО1000 | Park Operations: Guiding Policies, Regs and Laws |
| | | 108 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | | РО1000 | Park Operations: Guiding Policies, Regs and Laws |
| | | 109 | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | | РО1000 | Park Operations: Guiding Policies, Regs and Laws |
| | | IIO | АС1000 | Alternative Concepts: Eradication of Ungulates |
| | | | AC2000 | Alternative Concepts: Public Hunting (Open Hunt) |
| | | | AC3000 | Alternative Concepts: Professional Hunting |
| | | | РО1000 | Park Operations: Guiding Policies, Regs and Laws |
| | | III | AE23000 | Affected Environment: Native Hawaiian |
| | | | CR4000 | Cultural Resources: Impact of Proposa and Alternatives |
| | | | NH3000 | Native Hawaiian: Impact of Proposal and Alternatives |
| | | | WH2000 | Wildlife and Wildlife Habitat: Methodology and Assumptions |