

National Park Service
U.S. Department of the Interior

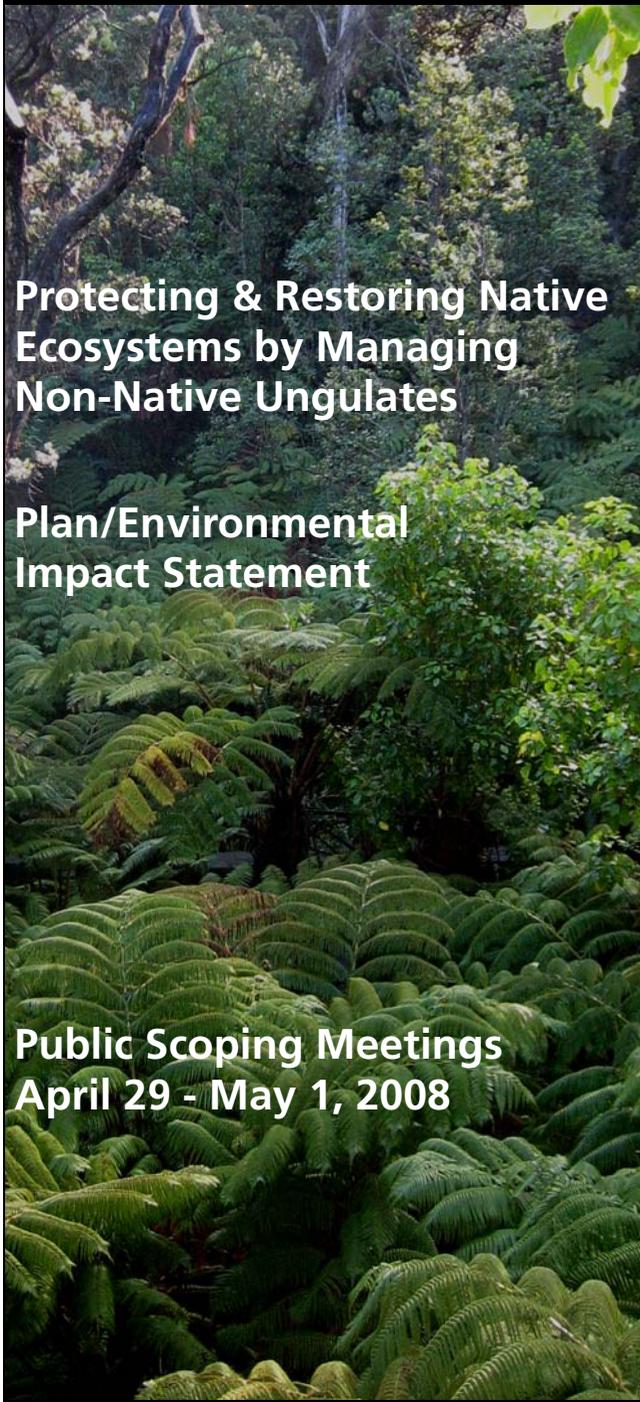


Hawai'i Volcanoes National Park

Protecting & Restoring Native Ecosystems by Managing Non-Native Ungulates

Plan/Environmental Impact Statement

Public Scoping Meetings
April 29 - May 1, 2008



You're Invited!

Your Participation

Because of your interest in Hawai'i Volcanoes National Park, we are requesting your input in developing the new plan/environmental impact statement (plan/EIS) to protect park resources from the impacts of non-native ungulates. Your participation is vital to our process. There are a number of ways to be involved, including attending an upcoming public scoping meeting or submitting comments in writing.

Scoping is the first step to involve the public in the environmental impact analysis process. Scoping includes holding meetings and providing opportunities for the public to comment. The NPS uses your comments to ensure that it is considering all of the possible alternatives for the management of the resource.

How to Comment

There are several ways to provide comments about the proposed plan/EIS:

- Attend a public meeting
- Submit comments electronically at <http://parkplanning.nps.gov/HAVO>
- Submit written comments by mail to Superintendent, Hawai'i Volcanoes National Park
RE: Protecting & Restoring Native Ecosystems by Managing Non-Native Ungulates Plan/EIS
P.O. Box 52
Hawaii National Park, HI 96718-0052

The comment period for scoping will be open until May 19, 2008.

We would like to keep you informed about the development of the plan/EIS. We can do this if you include contact information with your comments. However, before including your address, phone number, e-mail address, or other personal identifying information in your comments, please be aware that your entire comment, including your personal identifying information, may be made publicly available at any time.

Meeting Times & Locations

The public scoping meetings will be held at the following times and locations:

Tuesday, April 29 5:30 pm—8:30 pm
Hilo

University of Hawai'i at Hilo
University Classroom Building (UCB), first floor,
Room 100
200 W. Kawili Street
Hilo, HI 96720

Wednesday, April 30 5:00 pm—8:00 pm
Na'alehu

Na'alehu Community Center
95-5635 Mamalahoa Highway
Na'alehu, HI 96772

Thursday, May 1 5:00 pm—8:00 pm
Kailua-Kona

Kona Outdoor Circle Educational Center and
Botanical Gardens
76-6280 Kuakini Highway
Kailua-Kona, HI 96740

The same information will be presented at all meetings. Each meeting will begin with a short presentation by the NPS about the project and planning process. After the presentation, there will be an open-microphone listening session during which attendees may comment on the project. This will be followed by an open house, during which NPS staff will be on hand to visit with you, answer questions, and record your input. Attendees may also submit comments on written forms available at the meeting or on-line or by mail as described in the "How to Comment" section at the left.

National Park Service
U. S. Department of the Interior
Hawai'i Volcanoes National Park
P.O. Box 52
Hawaii National Park, HI 96718-0052



Protecting & Restoring Native Ecosystems by Managing Non-native Ungulates



Hawai'i Volcanoes National Park

Background

Non-native ungulates, or mammals with hooves, are an issue of concern in Hawai'i because of their detrimental effects on native diversity and ecosystems. The unique ecosystems of the Hawaiian Islands evolved without large mammalian herbivores and are particularly vulnerable to the impacts of non-native ungulates. Goats, pigs, sheep, mouflon sheep, and cattle, all of which are non-native ungulates, destroy habitat, inhibit native forest regeneration and cause local extinctions of vulnerable species. Non-native ungulates also have the potential to damage cultural resources at the park, which include archeological sites, cultural landscapes, and ethnographic resources.

The park has a long history of controlling non-native ungulates that began in the 1920s. Today, ungulate control has protected and allowed for the recovery of native species in many areas of the park. However, impacts from ungulates continue to be a concern in other parts of the park, including the recent Kahuku addition.

Purpose of and Need for Action

The purpose of the plan/environmental impact statement (plan/EIS) is to develop a refined and updated strategy for managing non-native ungulates that

- Supports long-term ecosystem protection
- Supports recovery and restoration of native vegetation and other natural resources
- Protects and preserves cultural resources

Non-native ungulate management is needed to adequately address the impacts of non-native ungulates, which result in

- Loss of native ecosystems, especially plant and animal communities
- Loss of sensitive native species, including state and federally listed threatened and endangered species
- The loss of irreplaceable cultural resources

This plan/EIS is also needed to ensure park actions are consistent with federal laws, regulations, and NPS management policies.

Resources at Risk



Photo © Jack Jeffrey

Non-native ungulates put park resources at risk. They encourage the spread of diseases that threaten native bird species such as the endangered 'Akiapola'au pictured above. Non-native ungulates directly impact plant species, such as the endangered silversword pictured at right, through herbivory. Below is an example of disturbance caused by non-native ungulates, which impact resources such as soil in addition to plants and animals.



NPS photo



NPS photo

Objectives of the Plan/EIS

MANAGEMENT METHODOLOGY

Develop informed, scientifically defensible methods for management of non-native ungulate populations to allow for the protection and recovery of park resources.

VEGETATION

(1) Protect and assist with the natural recovery of native plant communities from impacts of non-native ungulates.

(2) Provide for desirable conditions for active restoration of plant communities degraded by non-native ungulate activity to a native state.

SOILS

Minimize the impacts of non-native ungulates on soil erosion and disturbance.

WILDLIFE AND WILDLIFE HABITAT

Protect and assist with the natural recovery of native wildlife and wildlife habitat from impacts of non-native ungulates.

THREATENED AND ENDANGERED SPECIES

Protect and assist with the recovery of threatened, endangered and rare plant and animal species from impacts of non-native ungulates.

CULTURAL RESOURCES

Prevent impacts to archeological resources, historic structures, cultural landscapes, and ethnographic resources from non-native ungulate activity and management.

COORDINATION AND OUTREACH

Coordinate with (1) neighboring land managers implementing non-native ungulate management actions beneficial to the protection of park resources, (2) other stakeholders regarding non-native ungulate management and the protection of park resources, and (3) the public to enhance awareness and understanding of the impacts of non-native ungulates and the need for management to protect and restore park resources.

PARK OPERATIONS

Minimize long-term impacts, in terms of reduced staff time and resources, to programs at the park incurred by continued monitoring and management of non-native ungulates.

VISITOR EXPERIENCE

(1) Provide visitors with the opportunity to experience native ecosystems and cultural landscapes that have not been impacted by non-native ungulate activity.

(2) Enhance visitor awareness and understanding of non-native ungulate management actions and why actions are necessary for the protection of park resources.

(3) Minimize limitations to visitor access as a result of non-native ungulate management activities.



Koa forest recovery following removal of non-native ungulates from the park's Mauna Loa Strip
NPS photo

Preliminary Management Concepts

The NPS has identified several concepts that might be considered for protecting and restoring native ecosystems by managing non-native ungulates at the park. These preliminary concepts are meant to represent a starting point for discussions on alternatives for managing non-native ungulates. Concepts include

- Relocation, which could include removal of non-native ungulates from the park either by (1) live-capture and relocation, or (2) hazing (driving)
- Reproductive control, which could take the form of an administered contraceptive or sterilization
- Direct reduction, which could include using methods such as ground shooting, aerial shooting, and the use of snares
- A combination of two or more of the above concepts

Cover: Rainforest on Kilauea NPS photo