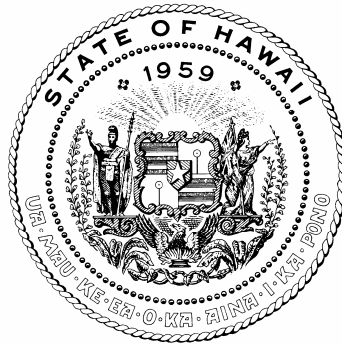


**REPORT TO THE TWENTY-FOURTH LEGISLATURE**

**REGULAR SESSION OF 2007**

**PLAN TO REDUCE THE STATEWIDE FERAL PIG POPULATION**



Prepared by

**THE STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

In response to House Concurrent Resolution 98, Senate Draft 1  
Regular Session of 2006

Honolulu, Hawaii  
November 2006

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**PLAN TO REDUCE THE STATEWIDE FERAL PIG POPULATION**

**PURPOSE**

House Concurrent Resolution (HCR) 98, Senate Draft (SD) 1, adopted during the Regular Session on 2006, requests the Department of Land and Natural Resources (Department) to prepare a plan to identify problem feral pig areas and reduce the feral pig population by considering, but not being limited by the following:

- (1) Expanding game management areas;
- (2) Expanding public hunting areas;
- (3) Extending the hunting season for feral pigs from seasonal to year round;
- (4) Eliminating the bag limit on feral pigs;
- (5) Contracting with private hunters for the removal of feral pigs; and
- (6) Providing cash bounties to licensed hunters for each feral pig captured.

This report is to be transmitted to the Legislature no later than twenty days prior to the 2007 Regular Session.

**PROCESS USED**

The Department conducted a review of existing policies and rules, compiled information on reports of nuisance pigs, and met with community representatives, including neighborhood boards, elected officials, the Hawaiian Humane Society, and the Pig Hunters Association of Oahu. This information was used to assess the scope of the problem, take steps to alleviate the problem, and develop recommendations for future actions on solutions involving greater public hunting and volunteer effort.

**BACKGROUND**

In developing HCR 98 SD1, the Legislature identified a number of environmental problems caused by feral pigs including 1) That feral pigs are an invasive species that cause considerable damage to the environment by; consuming ground-cover plants, destroying understory vegetation, churning and wallowing in the ground, causing erosion, and creating mosquito breeding areas; 2) That feral pigs also directly impact the survival of native forest birds and other species; and 3) That feral pigs have migrated in increasing numbers from State land to residential areas causing property damage and disturbances that affect the health, safety, and welfare of area residents. The Legislature also

identified a common method of controlling feral pig populations has been by scheduled hunting seasons sanctioned by the Department. However, the Legislature also noted that an increase in feral pig numbers and environmental damage near residential areas such as Manoa and Tantalus was the result of shortened hunting seasons, allowing feral pigs to maintain their numbers.

The Department implements a program of public hunting for feral pigs and other game mammals on its lands designated as public hunting areas throughout the State. These are lands primarily managed by DLNR's Division of Forestry and Wildlife (DOFAW) and consist of game management areas, forest reserves, portions of Natural Area Reserves and wildlife sanctuaries. While the Department has the duty to preserve, protect, and promote public hunting on appropriate portions of these lands under §183D-2, Hawaii Revised Statutes (HRS), it also has the duty to protect forests, watersheds, natural areas, wildlife sanctuaries, native and endangered plants and animals. Public hunting is a valuable management tool to help control game mammals in these areas and for these purposes.

Game mammals, pigs in particular, also occur in areas outside of DOFAW-managed public hunting areas where they can cause damage or constitute a nuisance. In many cases, particularly in rural areas and neighbor islands, private landowners may purchase a hunting license and control pigs themselves on their own private land, or as needed, the Department may issue permits to control these animals under §183D-61, HRS. The landowner can remove the pigs themselves with a wildlife damage control permit from the Department, or make arrangements with individuals, organizations or pest control companies to have the pigs removed. In some cases, control may be problematic due to lack of access to private or other government lands, concerns about public safety, firearms restrictions, conflicts with other public uses, community opposition, or liabilities issues. Control of pigs in urban and residential areas presents special issues and challenges that must be closely coordinated to ensure public safety.

## **ANALYSIS OF THE PROBLEM**

### **Oahu**

The Oahu DOFAW Branch Office receives approximately 12 calls per month concerning nuisance pigs. Virtually all of these calls concern pigs on private lands or lands managed by the City and County of Honolulu's Board of Water Supply (BWS). Recent years have seen a sharp increase in the number of nuisance pigs reported by residents in the communities in and around Honolulu, particularly in the Tantalus, Makiki, and Manoa areas. DOFAW staff responds to the reports by taking appropriate action to issue wildlife control permits, to provide contact information for individuals or organizations that are available to assist with the problem, or to provide direct assistance to remove the pigs.

During Fiscal Year 2006, DOFAW staff or cooperators providing assistance on Oahu, many of them in the areas mauka of Honolulu, removed approximately 550 nuisance

pigs. However, control programs deployed in these urban and populated areas require more complex coordination than in most rural areas. Firearms are prohibited in urban areas, as trails or forested areas may be frequented by the public for hiking and other recreational activities.

### Hawaii.

The Hilo DOFAW Branch Office receives a large number of reports of nuisance pigs. The volume of calls varies but may be as high as 100 calls in some months. Areas affected include rural and agricultural lands, public areas such as schools or parks, and residential areas. Where appropriate, DOFAW staff may provide direct assistance, for example by loaning traps, trapping pigs for release in game management areas, or trapping pigs for dispatch by interested hunters. For areas that are outside of DOFAW-managed lands, callers are provided with information to assist in the removal of pigs. This may include the issuance of a wildlife damage control permit or contact information for individuals that will conduct the removal work. In many cases, callers are seeking information to obtain authorization to dispatch pigs themselves. Where appropriate, the callers are provided with information needed to obtain a hunting license. There are several individuals on the Big Island that assist in pig removal without charge.

DOFAW staff in Kamuela receives approximately six to eight calls per month to respond to pig damage problems. On the Kona side of the Big Island, DOFAW staff and Pig Hunter Association members are assisting in responding to complaints on private lands, with limited resources, generally in the Kailua-Kona to Captain Cook area. Private landowners and residential property owners are encouraged to obtain traps or locate and cooperate with other local residents who have experience in or resources for pig control. A few hotel managers have reported pig problems.

### Maui County

Maui DOFAW staff receives few calls concerning nuisance pigs – as few as four in some years. For those calls that are received, the caller is advised to obtain a wildlife damage control permit, or in some cases staff may assist by providing traps or technical assistance. No reports of nuisance pigs are received on Molokai, and pigs are not present on Lanai.

### Kauai.

The Kauai DOFAW Branch Office receives approximately one to two control inquiries or reports of nuisance pigs per month and issues wildlife control permits as appropriate. A number of permits remain active on Kauai and provide the authority to remove pigs from areas as appropriate. Some landowners conduct the control work using their staff, while others make arrangements with authorized individuals or organizations. There are presently two vendors that conduct pig trapping on a fee basis on Kauai.

Prior to the demise of Amfac Sugar in 2001, sugar cane workers were allowed to hunt pigs after work. The system worked well as pig numbers were kept in check and employees brought meat to the table. However, since that time, many former sugar cane lands have been leased to individual farmers and ranchers that may not allow public hunting access. With lower hunting activity, pig numbers have increased in some areas.

Some Kauai landowners have reported that pigs are an increasing problem, particularly in watershed areas. However, access to those private lands for hunting or control remains a challenge that must be resolved before those pig populations can be reduced.

## **PROPOSED SOLUTIONS**

### **1) Work with the community to identify problem areas, issue wildlife control permits, and establish special hunts.**

While established public hunting and animal damage control programs may be an effective tool to assist in ungulate management in forest reserves and rural areas, a modified approach is needed in residential or urban areas where use of firearms and traditional methods is prohibited and presents a public safety risk.

Hunting associations have provided needed assistance to landowners over the years to employ specialized appropriate methods to remove unwanted pigs from these areas. However, any pig control program conducted in a residential or urban area requires close coordination among control personnel, residents, and landowners to ensure safety and access. The Department has assisted these efforts by facilitating communication among the associations and the concerned public. While these efforts are successful, they have become increasingly labor intensive in the Makiki-Tantalus areas over the last year where the number of reports has been increasing.

In order to develop more effective methods to deal with the problem, the Department began a pilot project to increase communication among residents, land managers, and the Pig Hunters Association of Oahu. The objective of the project was to facilitate and improve the mobilization of resources to remove unwanted pigs in a timely manner.

On April 6, 2006, a preliminary meeting was held with Department staff, watershed partnership personnel, legislative aides, and others to discuss the problem, and to plan a community meeting. On April 12, 2006, a town meeting was held at the Manoa Innovation Center to discuss feral pig control. "Got Pigs?" leaflets were temporarily posted around the neighborhoods to solicit participation. The objectives of the meeting were to; 1) Listen to neighborhood concerns, 2) Gather information, 3) Talk about what's in place now, and 4) Discuss solutions.

Participants included Representative Kirk Caldwell and staff, Councilwoman Ann Kobayashi, Senator Brian Taniguchi, DOFAW and other Department staff from the hunting trails and access, and watershed programs, Jason Sumiye, Coordinator of the Ko'olau Mountains Watershed Partnership (KMWP), the Pig Hunters Association of

Oahu, and many concerned community residents. A question and answer period was followed by general support for the Department to respond to community concerns and to develop a plan for action and timeline to reduce feral pig numbers in the Manoa area.

Following these meetings, the Department formed a working group to develop an acceptable hunting program to respond to community needs. The Working Group met on May 18, 2006, with members of KMWP, staff from DOFAW, the Honolulu Police Department (HPD), –the Department’s Division of Conservation and Resources Enforcement (DOCARE), Kamehameha Schools, and other interested parties. The Working Group met again on June 2, 2006, to continue to assess property access for pig control and develop plans to control feral pigs in the Manoa area. A public meeting was held on July 19, 2006, to solicit community review and comment on program design. Public comments were generally favorable, and the Working Group moved ahead with additional steps needed to implement the program.

After much discussion it was determined that access to lands managed by BWS would be an important component of the overall effort. The Working Group drafted a liability agreement with BWS for special hunting access to Board-controlled lands. The Agreement is currently under review by the Department of the Attorney General.

Surveys were conducted to provide information on the relative abundance of pigs in the Tantalus area on September 1, 2006. The surveys identified areas with high pig densities to guide control efforts. Additionally, the Working Group obtained transect data from the Army to compare relative numbers in other areas on Oahu. The Working Group also conducted a pig trap-building workshop on September 2, 2006, which was convened at DOFAW’s Makiki Baseyard to demonstrate the techniques, materials, and effort required to build neighborhood-usable traps.

The overall approach recommended by the Working Group is to deploy a combination of methods in conjunction with continued close community coordination. Methods are to include the opportunistic use of traps where effective, and special hunts using dogs, knives, and archery. The Working Group developed a legal notice to be issued by the Department specifying the details of the hunts, and a news release to accompany the Legal Notice. The first special hunt is tentatively scheduled to begin in November 2006.

## **2) Expand game management areas.**

Game management areas are established and managed to produce game animals for hunting on a sustained yield basis. The Department is attempting to increase game management areas where appropriate. The greatest opportunity for this is on private land. The Department has leased private land or entered into cooperative agreements with private landowners for hunting on Lanai, Maui, and Hawaii. A number of grant or acquisition programs exist that can lease or acquire areas for hunter access or game management. However, a number of issues related to watershed protection, endangered or sensitive native species protection, safety, and conflicts with other uses, limits application of this approach. Lands adjacent to high-density urban areas such as Manoa

are not appropriate for designation as game management areas because of safety and competing public use concerns.

### **3) Expand public hunting areas.**

The Department has the ability to expand public hunting areas on State and private lands by opening special areas and seasons to address problems. Acquisition or lease of lands may allow increased access to areas where pigs are common and un hunted. The Department actively seeks grant funding opportunities to enhance access and public hunting opportunities in new areas. Opening private lands requires cooperation of private landowners and establishment of cooperative agreements for long-term collaboration and in many cases, compensation to the landowner. Private landowners' willingness to allow public hunting has been limited by issues of liability, vandalism, enforcement, impacts on neighbors, and concerns about control of the property.

The Department has opened special controlled pig hunting seasons in the Honolulu Watershed Forest Reserve in and around Tantalus/Round Top in the past. This requires collaboration with residents, neighborhood boards, user groups like hiking associations, the HPD, DOCARE and many others. The expansion of these types of programs, both in terms of additional areas and more days of hunting, is being planned.

### **4) Lengthen the hunting season for feral pigs.**

The Department has the ability to lengthen the hunting season for feral pigs on State lands on a case by case basis, and does so in areas where pig densities are high. Most areas are already open year-round on Oahu (see Title 13, Chapter 123, Rules Regulating Game Mammal Hunting, Hawaii Administrative Rules). Seasons on private lands are set by the landowner. Many landowners do not allow hunting because of safety, privacy, vandalism, liability concerns, and proximity to residential areas.

### **5) Eliminate the bag limit on feral pigs**

The Department has the ability to liberalize bag limits on its lands on a case by case basis and does so where needed. Bag limits on private land are set by landowners. On DOFAW-managed lands, where pig reduction or elimination is the objective, bag limits may be liberalized or eliminated. In areas where the objective is to provide public access to game resources, bag limits are generally one or two per hunter. This is because hunters will generally only process and transport the meat of one or two pigs per day per hunter. Liberal bag limits that encourage wholesale shooting and leaving of animals are not employed where public hunting is serving to provide public access to game resources.

### **6) Contract with private hunters for the removal of feral pigs.**

The Department currently works with pig hunters to control unwanted pig presence, through the issuance of wildlife damage control permits and through ongoing cooperative efforts to refer calls and complaints, and share technical resources and information. In

some cases, contracts are used. In other cases, partner organizations or individuals are not paid, but receive necessary resources to increase successful control. Individuals or companies can remove pigs from private property if paid by the landowner. Non-profit pig hunters associations are frequently willing to assist without contract pay if provided access.

**7) Provide cash bounties to licensed hunters for each feral pig captured.**

Bounties have been found to be generally ineffective or counterproductive in pest management, and have often resulted in increases in the target species. Problems include fraud (such as bringing in evidence of kills from animals outside the target area), deliberate release of breeding animals, purposely leaving some animals behind to provide future income, and trespassing onto private property. Bounties may have some value if payments rise significantly as the number of target animals decrease, which may inspire hunters to bring in the last animals in a timely fashion. Fraud would remain a problem because there is not way to distinguish between wild and domestic animals to be turned over for the bounty.

RECOMMENDATIONS

Appropriate solutions to problems with nuisance feral pigs in Hawaii are site dependent. Areas that are most problematic for control efforts are those that are on private lands, on government lands where public hunting poses a safety risk or conflicts with other uses, and residential or urban areas where public hunting and use of firearms is prohibited.

Residential areas outside of Honolulu have been the focal point of recent complaints of nuisance pigs. Accordingly, the Department is developing a pilot project to work with the community to identify problem areas, issue wildlife control permits, and establish special hunts and trapping operations (Proposed solution 1, above).

Pursuant to HCR 98 SD1, the Department recommends that it continue this program, monitor the results, and provide a determination of the effectiveness of the program and its applicability to other areas that may have nuisance pig problems.

Program activities are to include:

- 1) Communication
  - a) Meet with community representatives bi-annually to continue dialogue;
  - b) Record complaints, provide information on solutions, and facilitate interactions with individuals able to assist in removal; and
  - c) Report program results to the community and interested individuals.
  
- 2) Planning
  - a) Maintain the pig control planning working group;
  - b) Identify areas in need of control; and
  - c) Direct hunting and trapping efforts to needed areas.

- 3) Implementation
  - a) Issue animal damage control permits as appropriate;
  - b) Continue special hunts in target areas; and
  - c) Continue trapping in target areas.
  
- 4) Monitoring, Assessment, Evaluation
  - a) Assess results and modify control program as needed;
  - b) Conduct surveys for pig signs in target areas; and
  - c) Evaluate applicability to other areas of concern

In addition, the Department recommends that it conduct a review and possible revision of the Rules Regulating the Hunting of Game Mammals (Chapter 13-123, Hawaii Administrative Rules) to determine whether seasons, bag limits, and hunting days should be modified to increase the numbers of pigs harvested in areas where pig densities create problems.