DAVID Y. IGE GOVERNOR OF HAWAI'I





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> ROBERT K. MASUDA FIRST DEPUTY

M. KALEO MANUEL DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES BOATING AND OCEAN RECREATION BUREAU OF CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERNA FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAW E ISLAND RESERVE COMMISSION LAND STATE PARKS

#### STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAI'I 96809

Testimony of SUZANNE D. CASE Chairperson

Before the House Committees on WATER & LAND and AGRICULTURE

Thursday, March 10, 2022 9:00 AM State Capitol, Conference Room 325, Via Videoconference

## In consideration of HOUSE CONCURRENT RESOLUTION 17 REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONVENE A TASK FORCE TO DEVELOP A FERAL UNGULATE MANAGEMENT PLAN FOR WEST HAWAI'I

House Concurrent Resolution 17 requests the Department of Land and Natural Resources to convene a task force to develop a feral ungulate management plan for West Hawai'i. **The Department of Land and Natural Resources (Department) supports this measure.** 

One of the Department's top priority issues is feral animal management. The proposed task force could bring additional attention to this important issue which may result in increased funding and coordination to implement control actions. In a similar measure that proposed a feral animal management plan (House Bill 1721), the Department testified that many of the solutions to control damage to feral animals have already been planned, yet implementation is underfunded. For example, the recurring general funds provided to LNR 804 (Forest and Outdoor Recreation) do not fully cover payroll costs and provide only meager operational funds for the program. The recent funding and position cuts to LNR 407, 402, and 172 have significantly reduced the ability of the Department to control feral animals through fencing and provide hunter access through road and trail maintenance. These cuts cripple the Department's ability to carry out future actions that require these staff to coordinate, such as the collaboration with the National Park Service to salvage goats for the public in Pu'u Honua O Hōnaunau, and special feral cattle hunts in the Hilo Forest Reserve. While additional planning is needed, the Department's capacity to manage such programs needs to be restored per the governor's budget request.

The Task Force provides a forum to gather feedback on the Department's existing efforts referenced in the resolution including increased hunting days, the default for which should be year-round/daily, increased bag limits, incentivization of commercially guided hunting operations, increased use of game mammals for meat and food security, targeted culling in overpopulated areas, and other methods. An overview of those issues are summarized below.

## Other Methods

While not listed in the resolution, fencing has proven successful for protecting landscapes from feral animals. Hawai'i Volcanoes National Park removed goats at a rate of up to 5,000/year for a half-century without any decrease in the feral goat population. After building fences, the park eliminated its goat population within a decade.1

The Maui Axis Deer Group is similar to the proposed Task Force because it consists of agencies, organizations, and political and community representatives dedicated to reducing ungulate impacts in specific areas. This group has been in existence for over twenty years. The group has commissioned population studies and published recommendations on deer management. Despite hunting regulations allowing daily year-round harvest with no bag limit for decades, deer populations have exploded since they were first introduced to Maui in 1959. These results demonstrate that removing restrictions to hunter harvest does not necessarily control the populations and that a more aggressive strategy of deer removal is needed. A private company harvests deer from private lands for sale as venison, and the Department's Division of Forestry and Wildlife (DOFAW) is seeking hunter access agreements with private landowners and culls deer in un-fenced watershed areas. While these actions help, the deer population continues to increase and spread to new areas.

Early on, the Maui Axis Deer Group recognized that a long-term protection strategy would require fences to keep deer out of sensitive areas, prioritizing protection for the upper watershed forests. Fence projects that encircle Haleakalā and Mauna Kahalawai (West Maui mountains), also known as the "Maunalei" projects (as they encircle the mountains like a lei) are being built incrementally with Watershed Initiative CIP funds and grants and are proving effective at controlling the spread of feral ungulates and restoring native ecosystems.

The Department has published multiple plans to create additional fenced areas in West Hawai'i that focus on upland forest and endangered species protection. Many of these projects are included in the Executive Budget request for CIP: LNR 407: Add \$4,000,000 for Watershed Protection and Initiatives, Statewide; and LNR 402: Add \$200,000 for the Mauna Kea Fence.

Increased Hunting Days, Open Seasons, and Increased Bag Limits Put Meat on Hunters' Tables Increasing hunting and harvest opportunities is a good first step, as hunters are valuable partners. This includes removing certain hunting restrictions, which DOFAW will be proposing after authority for adaptive management was provided by the Legislature via Act 49, Session Laws of Hawaii 2021. DOFAW's newly released hunter harvest app will provide real-time monitoring of

<sup>1</sup> Hawaii Conservation Alliance. 2005. Controlling Ungulate Populations in Native Ecosystems in Hawaii. <u>https://www.hawaiiconservation.org/wp-content/uploads/ungulates-1.pdf</u>. Adapted from Reeser, Donald W., 1993. Establishment of the resources management division, Hawaii Volcanoes National Park. Pages 431-436, Proceedings of Seventh Conference on Research and Resource Management in Parks and on Public Lands, George Wright Society

success rates and help inform future hunting regulations. DOFAW is already loosening certain restrictions via issuing animal control permits.

While DOFAW manages approximately a quarter of Hawai'i's land area (over 900,000 acres) as public hunting lands, access to these lands can be a limitation. Oftentimes, public hunting lands are land-locked by privately-owned residential areas. DOFAW needs additional capacity to counter the statewide trend of lands being sold and public access blocked off.

In the past fifteen years, more than 17,000 acres of new hunting land have been added to DOFAW's managed lands and an additional 28,000 acres are in the process of being added to serve the approximately 11,500 licensed hunters in Hawai'i. However, DOFAW is severely limited in the capacity to pursue these opportunities or maintain the roads and trails and legal agreements. The Department supports House Bill 1721 to prioritize projects and programs to implement these actions.

## Targeted Culling in Overpopulated Areas

The most cost-effective way to cull feral ungulates across large wilderness areas is by aerial shooting. While the Department has multiple long-term aerial shooting operations occurring statewide, efforts in West Hawai'i has encountered opposition. The Task Force would be an opportunity to revisit this option.

Thank you for the opportunity to comment on this measure.

# HCR-17 Submitted on: 3/8/2022 10:53:44 PM Testimony for WAL on 3/10/2022 9:00:00 AM

Submitted By	Organization	<b>Testifier</b> Position	Testify
Emma Yuen	DLNR	Support	Remotely Via Zoom

Comments:

I am available for questions to DLNR. Please allow me Zoom access.

DAVID Y. IGE Governor

JOSH GREEN Lt. Governor



PHYLLIS SHIMABUKURO-GEISER Chairperson, Board of Agriculture

> MORRIS M. ATTA Deputy to the Chairperson

State of Hawaii **DEPARTMENT OF AGRICULTURE** 1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

## TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER CHAIRPERSON, BOARD OF AGRICULTURE

## BEFORE THE HOUSE COMMITTEES ON WATER & LAND AND AGRICULTURE

# THURSDAY, MARCH 10, 2022 9:00 A.M. VIA VIDEOCONFERENCE

## HOUSE CONCURRENT RESOUTION NO.17 REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONVENE A TASK FORCE TO DEVELOP A FERAL UNGULATE MANAGEMENT PLAN FOR WEST HAWAII

Chairpersons Tarnas, Hashem and Members of the Committees:

Thank you for the opportunity to testify on House Concurrent Resolution No. 17 requesting the Department of Land and Natural Resources (DLNR) to convene a task force to develop a feral ungulate management plan for West Hawaii. The Department defers to DLNR and has the following comments.

There is a viable market for live goats on the island of Oahu evidenced by the transport of over an estimated, 3,000 live goats from the Hawai`i Island to Oahu for consumption during 2021. Identifying that segment of the populace and seeking their representation on the task force may prove useful to provide practical input on expanding the market.

Herding, trapping, and marketing of feral mammals by ranchers, trappers and other livestock producers is an important enterprise and local food source that can



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be an effective means of controlling large numbers of feral mammals. These activities need to be supported by landowners and government agencies to be successful and achieve the desired outcome. Additional incentives for organized herding, trapping, and marketing will help to increase the use of game mammals for meat and food security.

Thank you for the opportunity to comment on this resolution.



### COMMITTEE ON WATER & LAND Rep. David A. Tarnas, Chair Rep. Patrick Pihana Branco, Vice Chair

COMMITTEE ON AGRICULTURE Rep. Mark J. Hashem, Chair Rep. Amy A. Perruso, Vice Chair

## <u>HCR17</u>

## REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO CONVENE A TASK FORCE TO DEVELOP A FERAL UNGULATE MANAGEMENT PLAN FOR WEST HAWAII.

Thursday, March 10, 2022, 9:00 AM VIA VIDEOCONFERENCE

Chairs Tarnas and Hashem, Vice Chairs Branco and Perruso, and Members of the Committees,

The Hawaii Cattlemen's Council (HCC) is the Statewide umbrella organization comprised of the five county level Cattlemen's Associations. Our member ranchers represent over 60,000 head of beef cows; more than 75% of all the beef cows in the State. Ranchers are the stewards of over 750 thousand acres of land in Hawaii, or 20% of the State's total land mass. We represent the interests of Hawaii's cattle producers.

The Hawaii Cattlemen's Council **supports HCR17** which requests the DLNR to convene a task force to develop a feral ungulate management plan for West Hawaii.

Unmanaged ungulates are detrimental to the goals of conservation and agriculture alike. A concerted effort is needed for the State to assess the issue and take action. While ranchers have been addressing unmanaged ungulates using traps, managed hunting, and fences, coordinated leadership is needed to coordinate the removal of feral animals. Feral animals denude the land, cause economic hardship for agricultural entities, and disrupt sound grazing plans which are meant to improve soil health, maintain watershed function and protect ecosystem function.

We appreciate the opportunity to testify on this measure.

Nicole Galase Hawaii Cattlemen's Council Managing Director



P.O. Box 934 • Hilo, HI 96721 • (808) 333-6755 • www.hicattle.org • office@hicattle.org



HAWAI'I FOREST INDUSTRY ASSOCIATION (HFIA)

P. O. Box 66 ♦ 'O'ōkala, HI 96774 Phone: 808-933-9411 Email: hfia@hawaiiforest.org Website: www.hawaiiforest.org

#### Date: 3/8/22

**TO:** AGR Chair Mark Hashem, AGR Vice Chair Amy Perruso, WAL Chair David Tarnas, WAL Vice Chair Patrick Pihana Branco, Legislators Lowen, Marten, Matayoshi, Todd, Kunane Tokioka, Matsumoto, Ganaden, Kobayashi, Satoru Kong, Morikawa, Ohno, McDermott

FROM: Hawai'i Forest Industry Association (HFIA)

SUBJECT: Testimony in Support of HCR17

Dear Hawai'i Legislators,

On behalf of the Directors of the Hawai'i Forest Industry Association (HFIA), this testimony is in support of HCR17.

HFIA's long term mission has and remains to be to support and maintain Healthy and Productive Forests throughout Hawaii. The current state of the feral ungulate population on Hawai'i island threatens not only the health and productivity of the native forests on this island but also has the negative impacts to natural, human-built and economic environments as described within the resolution. HFIA and our partners are directly impacted by the overpopulation of feral ungulates, especially in west Hawai'i, in that goats are a consistent threat to our dryland forest restoration projects, including Ka'ūpūlehu Dryland Forest Restoration site and the La'i'Ōpua Preserve, both in North Kona. These ungulates damage our projects, costing us time and money, all while threatening the health of these dryland forest habitats and all that comes with that, including the native bird, plant and insect populations as well as watershed health.

HFIA believes that HCR17 seeks to not simply address the known threat that is the fast-increasing feral ungulate population in West Hawai'i, but seeks to do so in an inclusive manner, inviting and requiring many seats at the discussion table. We hope and value the potential this has to facilitate broad, deep and effective conversations about this issue.

We hope that you will support this resolution.

Mahalo, Don Bryan

Don Bryan, Øresident Hawai'i Forest Industry Association

Established in 1989, HFIA's is a nonprofit organization founded by committed to sustainable forest management. HFIA's mission is to promote healthy and productive forests and a sustainable forest industry through management, education, planning, information exchange, and advocacy. HFIA has over 100 members including woodworkers, landowners, sawyers, foundations, foresters, growers, educators, environmentalists, architects, millers, ranchers, and others interested in HFIA's mission and goals.

HFIA Board of Directors

Officers: President Don Bryan, Vice-President Guy Cellier, Secretary Peter D. Simmons, Treasurer Wade Lee Directors: Thomas Calhoun, Jeremy Campbell, Aaron Hammer, Nickolas Koch, Tai Lake, Gilles Lebbe, Michael Sowards, Irene Sprecher, Michael Tam, Jorma Winkler, Ron Wolfe, Aileen Yeh



23 E. Kawili St, Hilo, HI 96720 

Phone: (808) 933-3340

## Comments on HCR17 requesting DLNR to convene a Task Force to Develop a Feral Ungulate Management Plan for West Hawaii

House Committees on Water & Land and Agriculture March 10, 2022 9:00 AM

Aloha Chair Tarnas and Chair Hashem:

The Big Island Invasive Species Committee supports the formation of a Feral Ungulate Task Force to reduce the numbers of feral ungulates in West Hawaii, as long as it does not detract from the budget and other priorities of partner agencies. As a new member of the informal West Hawaii Feral Goat Hui, BIISC's understanding of this proposal is that the feral goat population in the lowlands of West Hawaii is the driving concern.

We agree. The burgeoning goat population is alarming. Residents across the island have given voice to the problems from a variety of perspectives: In some areas the animals appear to be starving; the animals present a hazard to vehicles, increasingly evidenced by their remains on state highways; the animals are getting into urban areas, tipping over garbage cans and bedding down in parking lots and on parked equipment; the animals are impacting native vegetation, evidenced by the almost complete loss of native `ilima, a`ali`i and `akia that once adorned Waikoloa Drive; their preferred browsing of leafy brush and stripping and killing trees increases the ratio of grass to leafy plants, which in turn increases the size and intensity of wildfires like the massive fire observed last year; the animals are immune to barbed-wire fences, entering agricultural production areas, damaging crops and competing for forage, forcing farmers to convert to expensive hog-wire fences. Herds of goats now wander through resorts and coastal areas, leaving piles of dung alongside tidepools and on our beaches and golf courses, as they strip coastal vegetation for moisture. The problem has really gotten out of hand.

While this problem extends throughout the drier parts of the state, it seems that the area of interest in West Hawaii is primarily below/makai of Mamalahoa Hwy, and from Lalamilo or Waikoloa into urban Kona.

This is an area roughly the size of the island of Molokai. This populated, largely privately-owned area presents a set of challenges that differs somewhat from the management of feral ungulates in forest reserves, where the state is the single landowner and where human-animal interactions are relatively few. Hunting in the area is highly constrained by land ownership and urbanization. Developing a feral ungulate management plan is therefore no simple matter. Members of the task force will need to gather new information to understand:

- Where the feral goat herds are spending their time and where removal or containment efforts can have the greatest impact;
- Who owns the land in these areas and what zoning, hunting, and other regulations apply;
- Where the source populations are that seem to be feeding into these lowland herds and how they might be contained or better managed;
- What legal authorities are available to the task force to get the work done;
- What type of personnel can be sent in to work on private land;
- How best to manage public engagement on the issue, gain buy-in, and reach private landowners here and abroad.
- What types and amounts of funding can be made available to implement the recommendations of the task force, understanding that available budget often drives recommendations.

BIISC is willing to serve or appoint someone to serve on this task force, but we note that without significant resources, including paid staff/contractors with mapping and legal expertise, a functional management plan might be beyond the reach of the task force. We therefore would respectfully ask for the assistance of the legislature in identifying sources of funds that could be used to carry out the purpose of this resolution.

Mahalo for your consideration,

Springer Kaye, Manager Big Island Invasive Species Committee



# Hawai'i Wildlife Fund

PO Box 1801, Kealakekua HI 96750 & PO Box 790637, Paia HI 96779

Celebrating 25 years of protecting Hawai'i's native wildlife through research, education and conservation.

### Committee on Water & Land

Rep. David A. Tarnas, Chair			
Rep. Patrick Pihana Branco, Vice Chair			
Rep. Sonny Ganaden	Rep. Dee Morikawa		
Rep. Bertrand Kobayashi	Rep. Takashi Ohno		
Rep. Sam Satoru Kong	Rep. Bob McDermott		

#### Committee on Agriculture

Rep. Mark J. Hashem, Chair Rep. Amy A. Perruso, Vice Chair Rep. Nicole E. Lowen Rep. Chris Todd Rep. Lisa Marten Rep. James Kunane Tokioka Rep. Scot Z. Matayoshi Rep. Lauren Matsumoto

## Re: Support for HCR 17

Dear Representatives of the Committee on Water & Land and the Committee on Agriculture,

On behalf of Hawai'i Wildlife Fund (HWF), I would like to express our **support for HCR 17** requesting the Department of Land and Natural Resources (DLNR) to convene a task force to develop a feral ungulate management plan for West Hawai'i. We also strongly encourage and support the expansion of such efforts to island-wide and across Hawai'i Nei, as ungulates are found in and are seriously damaging most of Hawai'i's ecosystems, on Federal, State, and private lands.

As a small non-profit organization, HWF has been protecting Hawai'i's native wildlife for over 25 years. And while we continue to see wildlife suffer due to effects of climate change, developments, and the inundation of plastic pollution in our ocean and beaches, the unfortunate issue of feral ungulates destroying sensitive native ecosystems and putting plant species at risk across the state is proving to be an increasingly difficult battle to fight. Combined with warming temperatures and a drier climate, these ungulates populations are increasing and are entering different habitats at an unprecedented rate.

March 8, 2022

With no natural predators and voracious appetites, feral ungulate populations have the capacity to devestate native forests and coastal strand species unfathomably quickly. Dessimating native species results in not only a loss in Hawai'i's precious biodiversity, but has the potential to alter watersheds, increase erosion, and accentuate the impacts of an already changing climate. More than one-third of Hawai'i Nei is forested land, supplying our islands with hundreds of billions of gallons of fresh water every year. Our communities' relationship with water and Hawai'i's forests is an interconnected one – yet we are allowing feral ungulate populations to increase to unmanageable population sizes, directly impacting our 'āina. It is our responsibility to minimize this threat to our native forests and coastal ecosystems today in order to ensure their quality and sustainability for future generations.

We humbly ask for your support in moving HCR 17 through, and hopefully expanding its application as widely as possible within the state.

Mahalo for all you do, and for your time and consideration of our comments.

Me ka mahalo pumehana,

Jodie R. Rosam, M.S. Hawai'i Wildlife Fund - Nā'ālehu, Hawai'i *Plant Program Coordinator* 

### HCR-17 Submitted on: 3/9/2022 8:56:39 AM Testimony for WAL on 3/10/2022 9:00:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Erin Chung	Hui Aloha Kiholo	Support	Written Testimony Only

Comments:

Aloha mai kākou,

We am writing on behalf of Hui Aloha Kīholo in support of Hawaii County Resolution 17. Hui Aloha Kīholo is a non-profit, community-based organization formed in 2007 by lineal descendants of Kīholo Bay. We currently operate under a curatorship agreement with the State Parks system and are the caretakers of Kīholo State Park Reserve.

Our mission is to protect, perpetuate, and enhance the cultural and natural landscape of the Kīholo Bay area through collaborative management and active community stewardship. As stewards of over 3,000 acres in West Hawai'i, the negative impact of feral goats in particular is clearly evident to us. Due to their voracious appetite for seedlings, we are largely unable to restore native plants to the landscape, hampering our ability to mālama 'āina (care for the land) in a way that is compatible with cultural practices (cultivating natural barriers rather than installing fences, for example). For generations, large coconut groves that are part of the rich wahi pana of Kīholo were cared for by families of place. As one tree fell, a seedling was replanted. These coconut groves are now in danger of disappearing because they cannot be replanted. Huge swaths of native vegetation and naupaka, natural barriers to tidal erosion, have been desecrated by goats, allowing erosion and fecal matter to wash into precious fresh water resources like the loko i'a (fish pond) and wai 'ōpae (anchialline pools). This erosion inhibits the proliferation of native species that is essential to a thriving ecosystem. Even campers have reported waking up to hundreds of goats in their campground, ruining their belongings and their precious time at Kīholo's shore.

In short, we need help and so do other community members. Establishing a task force with a broad spectrum of experience that works collaboratively with land managers, hunters, and invasive species control experts to tackle the issue of feral ungulates will serve not just Kīholo, but thousands of folks in West Hawai'i. We fully welcome the creation of such a task force and stand ready to provide further input and support if necessary.

Mahalo nui,

Hui Aloha Kīholo communications@kiholo.org www.huialohakiholo.org

## HCR-17 Submitted on: 3/8/2022 7:33:01 AM Testimony for WAL on 3/10/2022 9:00:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Shelly Aina	Individual	Support	Written Testimony Only

Comments:

In addition to the issues stated in HCR17, goats and sheep can also carry Toxoplasmosis, which can be deadly to our critically endangered Hawaiian Monk Seals. The populations of these non-native feral animals must be controlled for the sake of the health of the land, sea and all the many creatures inhabiting both.

## HCR-17 Submitted on: 3/8/2022 4:41:04 PM Testimony for WAL on 3/10/2022 9:00:00 AM

Submitted By	Organization	<b>Testifier Position</b>	Testify
Pulelehua Kimball	Individual	Support	Written Testimony Only

Comments:

Mahalo for the opportunity to comment in support of collaborative efforts to better manage the feral ungulate population in west Hawaii.

While i appreciate wild game as a source of meat and food security, the destructive impacts have far outweighed the benefits in much of west Hawaii. Land owners and funding agencies are spending vast sums to fence out feral ungulates because their impacts have significant costs for repair and in some cases irreversibly degrade our natural resources. Feral ungulates damage urban landscaping, destroy crops, increase erosion and soil loss, degrade and overgraze pasturelands, and destroy native ecosystems and convert them to completely different habitats.

Even when the expense is taken to fence an area to exclude feral ungulates, there is so much population pressure on the outside of the fence that there are occasionally instances where a feral animal gets in and wrecks havock before it can be removed. Why is it the land owners responsibility to pay the costs of feral animal damage when the feral, game, animals belong to the State?

Perhaps game reserves that are fenced in could be part of the solution so that everyone else does not have to fence out feral ungulates. Animal populations in game reserves could be managed through hunting for sustainable hunting population. Animals outside of these reserves could be managed through strategic eradication efforts.

Regardless the eventual solutions, i appreciate and support this resolution to address this issue which is significantly affecting residents of west Hawaii.

Mahalo,

Pulelehua Kimball

Holualoa resident

#### LATE \*Testimony submitted late may not be considered by the Committee for decision making purposes.

Chair David A. Tarnas, Vice Chair Patrick Pihana Branco, and members of the committee, my name is Grant Tanaka. I am a current BSW student at the University of Hawaii and I implore you to take the first step into protecting West Hawaii. Today, I am here to ask all of you to pass HCR17.

HCR17 is beneficial to not only beneficial to the environment in West Hawaii, however, is also beneficial to the population of the feral ungulates. Within West Hawaii, we are currently facing an epidemic where the mass population of these animals are harming the crops that are in the surrounding areas leading to massive losses within the agricultural industry. Not only does the overpopulation of the feral ungulates harm the ecosystem and the nutrients that are provided within the given area, but they are also a danger to our safety as human beings. Within West Hawaii, there has been an increase in the number of motorized vehicles caused by the feral ungulates. Statefarm has reported an increase within accidents caused by animals to an astounding 36.1% within the pandemic which is about 29% higher than the national average. Not only has the effect on the residents taken a hit due to the overpopulation of these species, but we have also seen the elimination of some of our Native plants thus eliminating the ground cover. According to Blackmore ""If grazing is continued, forest cover can be expected to continue a slow decline. If grazing is removed, however, the consequent accumulation of grass biomass can increase fuel loads and augment the probability of catastrophic fire and rapid loss of the residual forest." (Blackmore et al 2000)

The feral ungulates are a threat to preserving West Hawaii's ecosystem and the proposal of allowing a task force to regulate their population not only benefits our safety but the safety of the land as well. If we do not take the first step in protecting our home, then who will? I want to thank you all for listening to me and I look forward to your support!