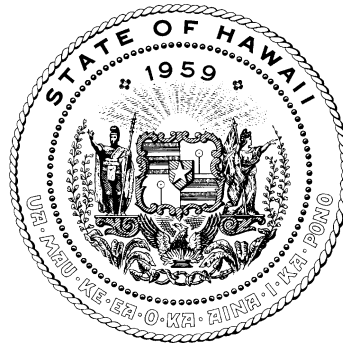


**REPORT TO THE THIRTY-SECOND
STATE LEGISLATURE OF HAWAI‘I
2024 REGULAR SESSION**

**RELATING TO THE WILDLIFE
REVOLVING FUND FISCAL YEAR 2023**



Prepared by

THE STATE OF HAWAI‘I
DEPARTMENT OF LAND AND NATURAL RESOURCES

In response to Section 183D-10.5, Hawai‘i Revised Statutes

October 01, 2023

RELATING TO THE WILDLIFE REVOLVING FUND FISCAL YEAR 2023

PURPOSE

The goal of the Wildlife Revolving Fund (WRF) is to provide funds to manage and enhance public hunting opportunities in Hawai'i. Act 290, Session Laws of Hawai'i 1991, amended Section 183D-10.5, Hawai'i Revised Statutes (HRS), by adding a requirement for an annual report to be prepared by the Department of Land and Natural Resources (Department) on the status of the WRF and transmitted to the Legislature no later than twenty days prior to the convening of each regular session. Reporting requirements include:

1. The source and application of monies deposited into the fund, including a description of the criteria and process used to determine funding priorities
2. A description of programs and activities supported by the fund
3. A summary of program highlights and accomplishments; and
4. A description of future program plans, including specific goals and objectives.

FUNDS

Section 183D-10.5(b), HRS, provides that the following proceeds shall be retained by or transmitted to the Department for deposit into the WRF:

1. Moneys collected as fees for hunting licenses, attendance of hunter education training programs, and use of public target ranges.
2. Moneys collected under the provision of any law relating to the importation, taking, catching, or killing of game, wildlife, and products thereof.
3. Moneys, other than informers' fees authorized under Section 183D-11, HRS, collected as fines or bail forfeitures for violation of Chapter 183D, HRS, or any provision of Chapter 195D, HRS, concerning wildlife conservation; and
4. Moneys collected from the sale of:
 - A. Any article, in addition to a hunting license, which a person is required to purchase from the Department to hunt, when the requirement is established by law or rule; and
 - B. Any work of art upon which the article under A is based.

For Fiscal Year (FY) 2023 the major source of revenue was the sale of game tags followed by the sale of hunting licenses. Revenues exceeded the Department's authorized budget ceiling for the WRF of \$776,435.00. New expenditures totaled \$440,271.97. The unencumbered cash balance at the end of FY 2023 amounted to \$1,023,551.66, with outstanding encumbrances of \$299,883.66 resulting in unencumbered cash for carryover of \$723,668.00.

Status of S-343

Beginning cash balance of fund on July 1, 2023.	\$751,991.58
Revenues during FY 2023	\$864,174.26
Cash Transfer from FY 2022	\$599,649.37
Expenditures during FY 2023	(\$440,271.97)
Unencumbered ending cash as of June 30, 2023	\$1,023,551.66
Encumbrances as of June 30, 2023	(\$299,883.66)
Expired encumbrances from prior years	\$28,323.58
Unencumbered cash for carry over as of June 30, 2023.	\$723,668.00
Total FY2023 carry over	\$751,991.58

Summary of Revenues FY 2023

Hunting guide license	\$2,425.00
Game bird farmer licenses	\$475.00
Hunting licenses with wildlife conservation stamp	\$372,331.00
Wildlife Conservation stamps	\$125.00
Game bird stamps	\$52,551.00
Game tags	\$417,783.39
Interest and Refund /reimbursement of prior period expenditures	\$950.00
Mis. income	\$517.40
Investment Pool Account	\$17,016.47

Total Revenue for FY 2023 **\$864,174.26**

Summary of Expenditures FY 2023

Personnel	\$192,650.27
Operations	\$236,117.03
Admin costs	\$11,504.67
Total Expenditures	\$440,271.97

Summary of Outstanding Claims FY 2023

Operations Claims	\$343,281.84
Amount expended	\$43,398.18
Total remaining balance of outstanding claims and contracts	\$299,883.66

HUNTING LICENSE SALES OVERVIEW

Overall, Hawai'i hunting license sales and sales of non-resident licenses have shown an increasing trend since a low was recorded in 2005 and 2007 (Figure 1 and 2). Revenue from license sales is deposited into the WRF and used to benefit wildlife management and hunting programs. In FY 2023 a total of 13,539 hunting license were sold. Game tags sold during this year supercede the sales of resident and non-resident hunting license which is a first.

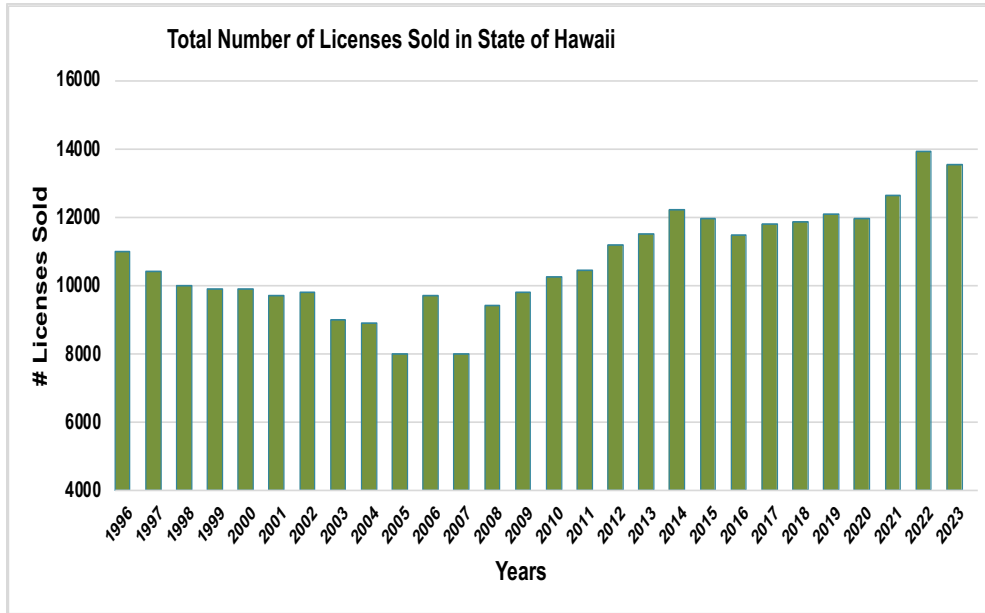


Figure 1. The total number of hunting licenses sold in the State of Hawai'i per fiscal year (1996 – 2023).

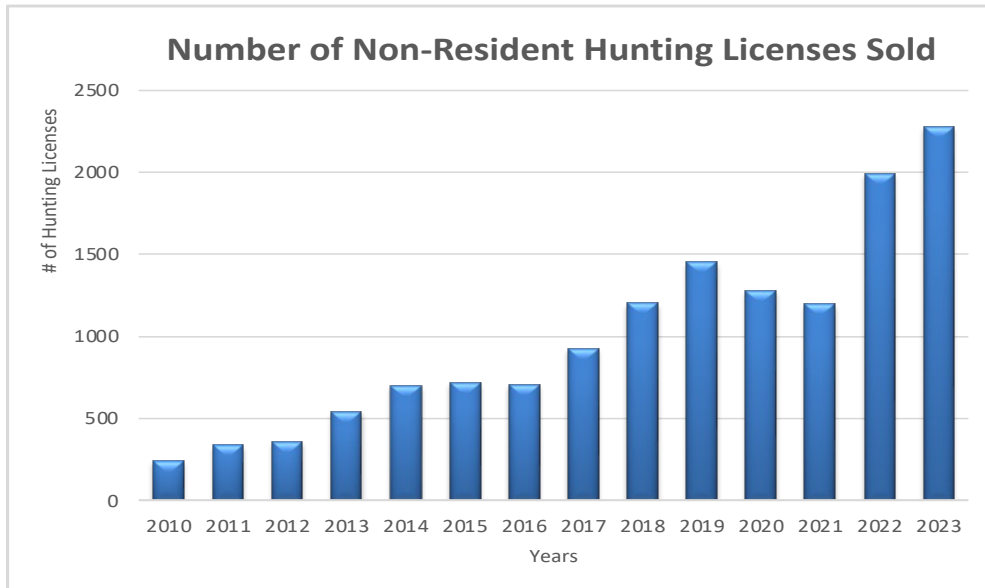


Figure 2. The total number of non-resident hunting licenses sold per fiscal year (2010 – 2023).

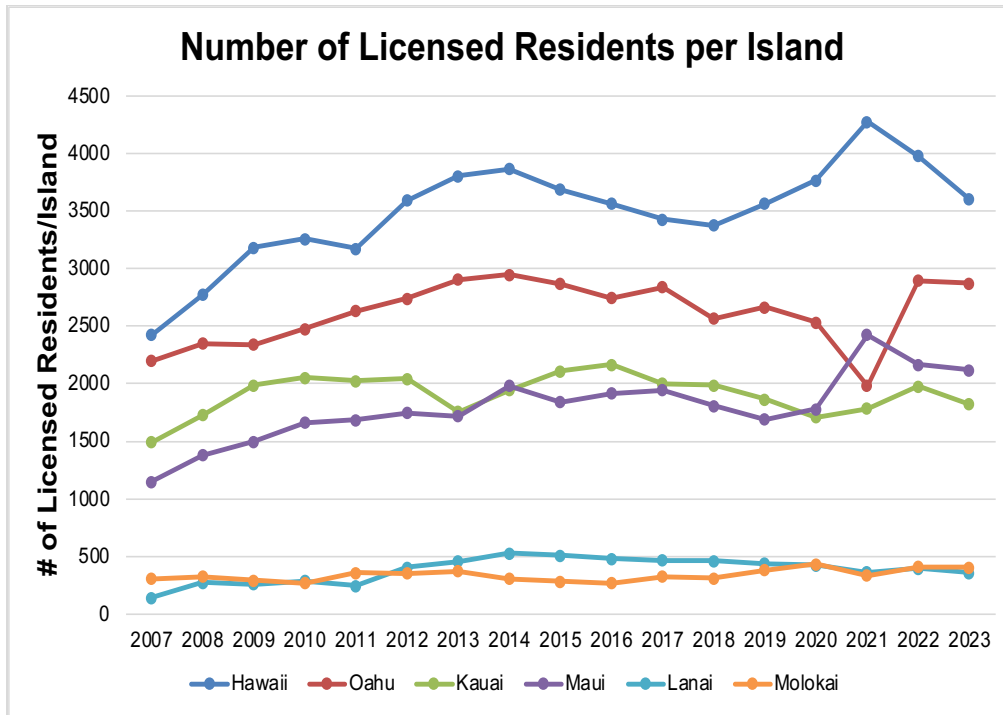


Figure 3. The total number of residents with a hunting license per island for fiscal years 2007– 2023.

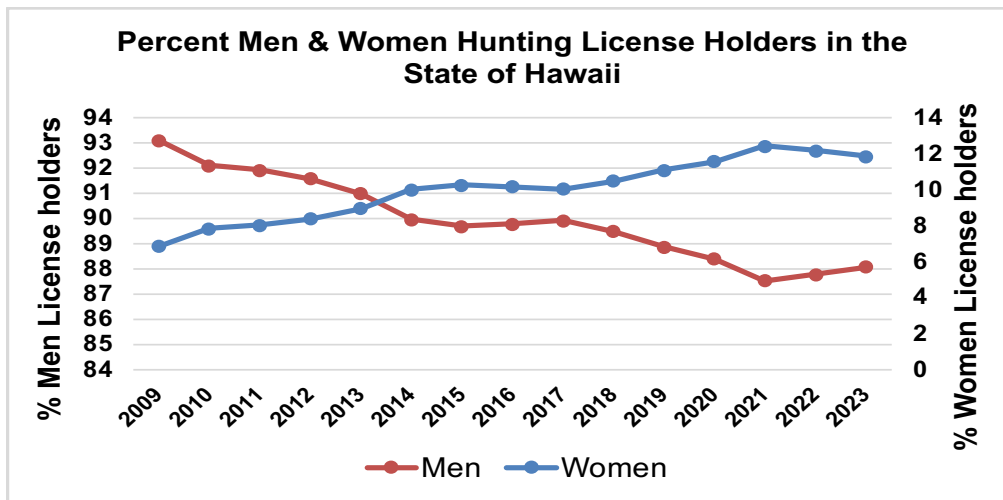


Figure 4. Percent men and women license holders in the State of Hawai'i for fiscal year 2009 – 2023.

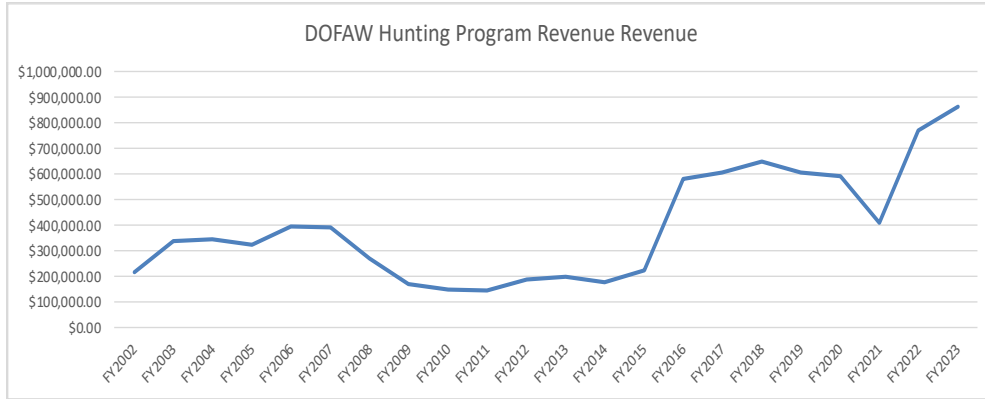
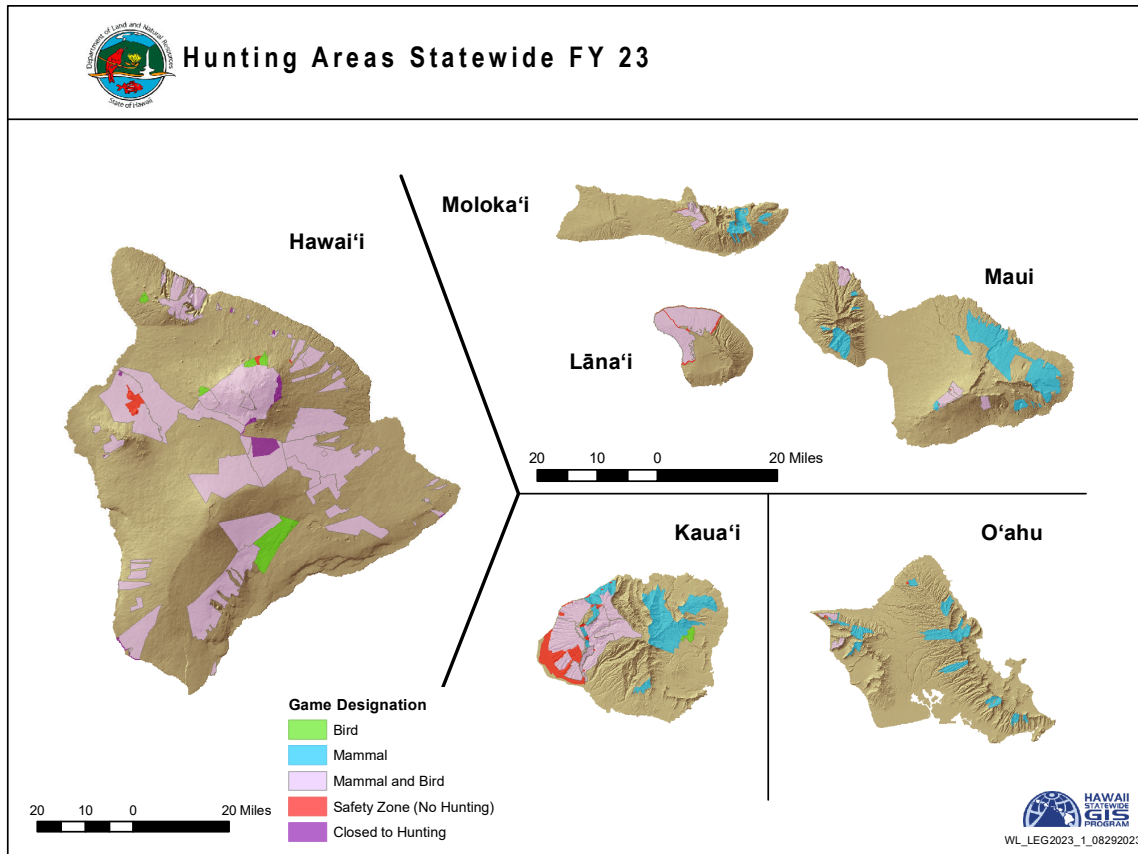


Figure 5. Revenue derived from the WRF for fiscal year 2002– 2023.



KAUA'I BRANCH (for maps and photos see Exhibit 1.)

Objectives: Maintain and enhance wildlife habitat and facilities on public hunting areas, game management areas, and wildlife sanctuaries; and improve game bird and game mammal hunting opportunities.

Accomplishments: Funding was used to manage habitat for game birds, and maintain infrastructure designed to facilitate game bird hunting. For specific activities see the following:

Funded a Project Assistant through the Research Corporation of the University of Hawai'i (RCUH). The primary function for this position was to assist the Game Program Biologist in:

- Habitat management by range mowing.
- Game bird propagation project operations.
- Maintaining access locks and gates to control hunt areas.
- Field operations to manage and maintain game mammal and bird habitat.
- Assist in predator control in and surround the GMA.
- Planning, coordination, and logistics for Game Management Section.
- Gamebird Propagation:
 - Import game birds for rearing and release.
 - Breed, incubate, rear and release.
 - Construct, maintain watering units, brooder and fly pens.
 - Purchase food and other material to support live birds.

Habitat Management and Operations

Repaired and maintained tractors, mowers, and equipment used for road and habitat maintenance activities. (Kekaha GMA, Wailua GMA and Unit L). Purchased supplies for power tools used to maintain access infrastructure and roads.

Maintained (250) acres of viable game bird habitat/traversable hunting grounds with Kubota tractors and various mower attachments.

Game Bird Propagation

Successfully imported (500) ring-necked pheasants, and 150 melanistic blue pheasants, for the upcoming FY 2023-24 game bird season. (Kekaha and Wailua GMA). Birds will be released every few weeks during the game bird hunting season.

Successfully bred, incubated, and reared 500 ringneck, melanistic mutant and hybrid (ringneck/mutant). Pheasants will be released thru out the game bird season.

Future Program Plans

1. Fund a Wildlife Technician position to perform tasks related to ongoing management of public hunting areas - \$75,000 (100% WRF). This position will assist the game management Wildlife Biologist in field operations.
2. Fund a RCUH Wildlife Technician position to perform tasks related to ongoing management of public hunting areas - \$10,000 (100% WRF). This position will assist the game management Wildlife Biologist in various game operations and projects.
3. Continue to purchase 650 pheasants, feed, and other supplies to keep gamebird program annually- \$12,000 (100% WRF)
4. Purchase equipment and supplies needed for ongoing operations and maintenance in wildlife management areas - \$25,000 (100% WRF).
5. Purchase incubating supplies, brooding supplies and feed to propagate up to 1,000 ring-necked pheasants and/or other game bird species annually - \$15,000 (100% WRF)

O‘AHU BRANCH (for maps and photos see Exhibit 2.)

Game Management

Objectives: Maintain and enhance wildlife habitat and facilities on public hunting areas, game management areas, and wildlife sanctuaries; and improve game bird and game mammal hunting opportunities.

Accomplishments: Funding was used to manage habitat for game birds, and maintain infrastructure designed to facilitate game bird hunting. For specific activities see the following:

1. Staff -

Funded a biological technician through the Research Corporation of the University of Hawai‘i (RCUH) to assist with various game related projects, including:

- Processing and issuing permits for ungulate control/hunting opportunities in forest reserves and other state lands that are not open to public hunting.
- Assisted with a game bird propagation project operation.
- Manages Game Bird Releases and coordinates hunter volunteer opportunities.
- Maintaining access locks and gates to control hunt areas.
- Maintains digital profiles for public hunting units on Outer Spatial smart phone application.
- Maintains predator trap lines and baiting procedures in Game Management Areas and game managed facilities.
- Collects and processes hunter check station data for analytical reporting.

2. Habitat Management and Operations -

- Repaired and maintained tractors, mowers, and equipment used for road and habitat maintenance activities. Purchased supplies for power tools used to

maintain access infrastructure and roads. Repaired and maintained WL side-by-side (Polaris Ranger) critical for accessing the remote and less-accessible areas of management. (Appendix: Figure 2)

- Acres currently managed with heavy equipment for public hunting and habitat enhancement in Kuaokala GMA:
 - Forest Section – 26 acres
 - Ranch Section – 25 acres
- Acres Managed by Cattle Cooperative Agreement in Kuaokala GMA:
 - Ranch Section – 300 acres
- New Expansion of habitat in Kuaokala GMA in FY23:
 - Ranch Section – 10 acres

3. Game Bird Propagation -

- Program purchased (6) New Brooder Box Systems (GQF 0534 Universal Box Brooder) to enhance success and survivability of the day-old game bird chicks. (Figure 6)
- The (2) Kawainui Fly Pens were maintained and repaired throughout the entire year. Additional chicken wire fencing was applied to prevent any predators from entering. New 30’x 60’tarps were installed for the roof of the fly pen, allowing for more protection from elements and protecting the interior habitat. (Figure 7)
- The Waialua Farm increased in size and number of game bird facilities. Along with hunter volunteers, the program was able to construct (1) new fly pen that would be subdivided into three pens. This addition would allow for more breeder groups, separation of smaller bird species orders, or rotation of incubator raised populations. We also increased the game bird project fencing perimeter to house the larger footprint of facilities. We increased the number of predator traps, baiting, and trap checks in order to combat the increased presence of cats and mongoose.
- For the 2023 -2022 Game Bird Season, Oahu DOFAW was successfully able to import a total of (710) game birds:
 - (421) Kansas Ring-necked Pheasants
 - (184) Melanistic “Blue” Pheasants
 - (105) Jumbo Ring-necked Pheasants

4. New Hunting Areas and Access -

- Purchasing of signage and other miscellaneous equipment in order to run special hunts or open new State managed areas under a Wildlife Control Hunt program.

New hunting accesses via a DOFAW Wildlife Control Permit include:

WCP Project Area	Number of Permits Released FY21	Number of Permits Released FY22	Number of Permits Released FY23
Board of Water Supply: Makaha Valley	6	0	19
Honouliuli FR	1	4	3

Manoa-Tantulus Section	24	24	32
Moanalua Section	22	34	35
Pia Valley Natural Area Reserve	2	15	19
Waianae Kai FR – Restricted Watershed	3	16	27
Waimanalo Forest Reserve	19	30	25
Poamoho Section Vehicle Access Permit	143	141	133
Total	220	264	293

Future Program Plans

1. Restore revenue from the sale of hunting tags, stamps, and fees and fill vacant General Laborer position - \$60,000 (100% WRF).
2. Fund a Wildlife Technician position to perform tasks related to ongoing management of public hunting areas - \$25,000 (100% WRF). This position will assist the game management Wildlife Biologist in field operations.
3. Purchase equipment and supplies needed for ongoing operations and maintenance in wildlife management areas - \$15,000 (100% WRF).
4. Through partnerships with the University of Hawai'i, fund graduate level research to understand the socio-economic impacts of Hawai'i's hunters - \$10,000 (100% WRF).
5. Propagate and release 700 ring-necked pheasants and/or other game bird species annually - \$10,000 (100% WRF).
6. Expand field operations in Makua Kea'au Forest Reserve to incorporate increased opportunities for game mammal and bird hunting.
7. Improve facilities and equipment to better house the Game Bird Rearing Program for overall all project success and efficiency.

MAUI BRANCH (for maps and photos see exhibit 3.)

Lease of Cooperative Game Management Area - Lānaʻi

Objective: Provide 30,000 acres of land on Lānaʻi for sport hunting and wildlife management.

Accomplishment: The annual lease rental for the Lānaʻi Cooperative Game Management Area (CGMA) was paid via WRF monies. This area provided hunters the opportunity to pursue Axis deer, Mouflon sheep, and a variety of game birds.

Game Mammal Aerial Survey - Lānaʻi

Objective: Conduct annual game mammal surveys of the Lānaʻi CGMA and private portions of Lānaʻi Island (Pulama Lanai) using a Hughes 500 helicopter. Surveys conducted on the state managed portion of Lānaʻi are used in part for setting upcoming bag limits. Staff from Maui lead the survey effort for both the fall and spring surveys. Associated costs for the spring survey includes only staff travel.

Accomplishments: The 2022 fall game mammal aerial survey on the island of Lanai occurred on September 12, 2022 (LCGMA) and September 13, 2022 (Pulama Lanai) and the 2023 spring game mammal survey was conducted on March 6, 2023 (LCGMA) and March 7, 2023 (Pulama Lanai). Costs associated with the fall survey included helicopter rental and staff travel and the associated costs for the spring survey included travel expenses only.

Personnel Expenses - Lānaʻi

Objective: Maintain and service facilities and field operations on Lānaʻi through the Forestry and Wildlife Worker II position. Ensure the hunter check station is open beyond normal operating hours for the public hunter to check in and purchase game tags.

Accomplishments: A Forestry and Wildlife Worker II position on Lānaʻi, was funded through the WRF and assisted the Forestry and Wildlife Technicians with the upkeep and maintenance of 30 miles of water unit pipeline, 25 water units, a multitude of signs, and 54 miles of access roads in the CGMA. The Forestry and Wildlife Worker II also supported habitat management, game bird and game mammal surveys, enclosure maintenance, predator control and any other duties needed to support both the game and non-game program on Lanai. Due to staff shortages on Lanai, staff from Maui traveled to Lanai to assist in hunter check ins for the entirety of the 2022 Lanai combination Axis Deer and Mouflon Sheep hunting season. Associated costs for assisting in hunter check in included staff travel and overtime costs due to hunter check station hours being opened beyond normal working hours.

Management of the Lottery Hunts - Lānaʻi

Objectives: Provide opportunities for the public to apply online for hunts. Mail application cards, including lottery results, to hunters who apply online. Provide a conference room to conduct and accommodate the public for the Axis deer and Mouflon sheep lottery. Provide

hunters the necessary tags and approval forms needed for hunting on Lāna‘i. Improve the online application system and lottery program.

Accomplishments: Hunters interested in applying for the State managed hunts on Lanai were required to apply online. Annual service fees were paid to the host of the online site for Lanai hunt applications. A lottery was conducted at the DLNR/DOFAW baseyard and all successful applicants were mailed an application card. No conference rooms were rented to conduct the lottery. Permit cards were printed for both the 2022 combination hunt and 2023 Lanai Axis deer hunt indicating the weekend a hunter was drawn. Axis deer and Mouflon sheep tags were purchased in preparation for the 2022 and 2023 hunting seasons. First class stamps were purchased and used to mail applicants the permit cards informing them of the dates they are allowed to hunt. The online application program was further updated to allow hunters to modify group members and group sizes during and after the application periods.

Game Mammal Facilities Operations and Maintenance – Maui District

Objectives: Rent dumpster(s) during the Axis deer and Mouflon sheep season for hunters to dispose of carcasses. Purchase materials/equipment required for the hunting program to function. Ensure vehicles are maintained and kept operational. Support travel to Lāna‘i for meetings, and travel to outer islands for game related meetings. Purchase supplies for the office/hunter check station to ensure that the office/hunter check station can support staff in assisting the hunting public. Hire cleaning service for the Lanai office to ensure the office is kept in a sanitary condition. Provide support for other aspects of maintaining the hunting program for the district of Maui. Road maintenance for approximately 45 miles of roads within the Lanai Cooperative Game Management Area. Purchase pheasant chicks, including necessary supplies, to release into public hunting areas for game bird enthusiasts.

Accomplishments: Dumpsters were rented for the Axis Deer and Mouflon Sheep hunts that provided the hunting community with the facilities to dispose of animal carcasses. Hardware items were purchased to maintain infrastructure within the Lanai Cooperative Game Management Area. Supplies/materials for water units were purchased and shipped to Lanai to be used to repair any water units that showed wear and tear or were damaged. Vehicle repairs were charged to this fund, ensuring staff vehicles were available and maintained for completing wildlife projects and facilities. Wildlife staff traveled off-island to attend meetings. Office supplies were purchased to ensure the office was supplied to better service the public. A cleaning company was hired to clean the office at the Lanai office/hunter check station. Approximately 250 pheasant chicks were purchased and eventually released on public hunting areas within Maui Island. To support the raising of pheasant chicks, feed was purchased and provided to the individuals raising the birds.

Current and Future Program Plans

1. Fund rental of lease on Lāna‘i - \$1,000 (100%WRF).
2. Fund Forestry and Wildlife Worker II position on Lāna‘i for facility upkeep and maintenance - \$85,000 (100% WRF).
3. Fund Lāna‘i check station overtime for Forestry and Wildlife Technician V and IV

- positions - \$5,000 (100% WRF).
4. Fund game mammal surveys on Lāna‘i - \$20,000 (100% WRF).
 5. Fund management of lottery hunts on Lāna‘i; document printing, data input, updating and improving online application and computer-generated lotteries and drawings - \$5,000 (100% WRF).
 6. Fund game mammal facilities development, operations and maintenance on Lāna‘i - \$50,000 (100% WRF).
 7. Fund clerk position for Lāna‘i check station - \$50,000 (100% WRF).
 8. Habitat remediation/enhancement - \$30,000 (50% WRF).
 9. Purchase flatbed truck - \$75,000 (75% WRF).
 10. Fund road repairs – \$50,000 (75% WRF)
 11. Fund vehicle repairs and maintenance - \$25,000 (50% WRF)
 12. Purchase satellite collars for Mouflon Sheep and Axis Deer for Lanai - \$24,000.00 (100% WRF)
 13. Helicopter rental for satellite collar operations - \$20,000.00 (100% WRF)
 14. Fund the purchasing and feeding of game birds to be released within Maui Nui - \$5,000.00 (100% WRF)

WEST HAWAI‘I (for maps and photos see exhibit 4.)

Kamuela State Tree Nursery Base Yard Security Fence Installation

Objective: Install a 6’ tall chain-link fence surrounding the State Tree Nursery in Kamuela.

Accomplishment: Installation of the fence is approximately 75% complete. It is scheduled to be fully installed by May 2024.

Sheep and Goat Surveys at Puu Anahulu and Puu Waawaa

Objectives: accurately estimate sheep and goat population numbers in public hunting units E (Puu Anahulu GMA) and F (Puu Waawaa Forest Reserve).

Accomplishment: Deployed 80 game cameras across approximately 105,000 acres of public hunting area. These cameras were programmed to use instantaneous sampling method to take pictures of and statistically generate population estimates for sheep and goats. The cameras were deployed in February 2023 and retrieved in April 2023. Memory cards were mailed to Brigham Young University for statistical analysis. We are awaiting statistical results from the 2023 surveys. Results from the 2022 surveys estimate the goat population at ~2,150. Estimates from 2020 (~2,150), 2019 (~1,900), and 2018 (~985) indicate a stable population. The previous estimates suggest a stable or slightly growing population of goats. This is in stark contrast to the drastic increase in goat numbers witnessed in other parts of West Hawaii, particularly in the Waikoloa, Kawaihae, and Kona areas.

Game Bird rearing and release program

Objectives: support sport hunting of Game birds and supplement natural game bird populations through purchase of select gamebird species for rearing and release in PHA and safety zones. 12

Accomplishment: In 2022 students from Kohala high school built a brood pen and a fly pen as part of a class project. In Fall 2022 they raised and released 200 chukar partridge into the public hunting area on Mauna Kea GMA and Forest Reserve, hunting unit A and Kaohe GMA, hunting unit G. We are continuing to assist them in 2023 with the importation of 475 chukar partridge. They will raise the birds until they are adults and release them in the hunting area to improve the natural population of chukars.

In 2023 we also assisted Kanu o Ka Aina New Century Public Charter School to develop their own game bird rearing program. We helped the purchase \$12,000 of materials and equipment to build a game bird rearing facility on their campus. They will be raising pheasants to be released into the public hunting areas.

Future Plans and Projects

1. Annual sheep and goat surveys using camera traps (\$15,000 20% WRF).
2. Support game bird facilities and game bird rearing activities (\$2,000 100%WRF)
3. Expand and improve game bird release program (\$2,500 100% WRF)
4. Fill position of half-time general laborer (\$42,000 50%fte 100% WRF).
5. Improve game bird habitat on Mauna Kea.

EAST HAWAI'I (for maps and photos see exhibit 4.)

General Laborer Position

Objectives: Pursue duties pertaining to game/hunting program. Conduct predator control activities, maintain wildlife facilities, and conduct game mammal and game bird species surveys.

Accomplishments: Position a half time General Labor was filled in November 2022 after being vacant since Jan 2019 just prior to COVID-19 pandemic. The position was frozen during COVID and no movement in hiring happened in FY19-21 until late 2022.

Commissions on Hunting License Sales

Objective: To maintain a network of hunting license vendors on the island of Hawai'i for sales of the 2022-2023 Hawai'i hunting licenses.

Accomplishment: Hunting licenses were sold by two east Hawaii vendors locations. Online sales are becoming the preferred method for both the vendors and the public though a small number of people come into the district office or vendors to purchase their license.

Mile Marker 16 Shooting Range

Objective: Assist with maintenance and questions concerning Mile Marker 16 range.

Accomplishment: a portion of the Hilo Forest Reserve Unit D public hunting area at Mile Marker 16 on the Daniel K Inouye HWY is managed as a public shooting range by the DLNR/DOFAW/DOCARE. Mile Marker 16 shooting range has been open as a location for the public to improve marksmanship and practice the safe and responsible use of firearms, as taught in Hunter Education classes. The Division of Conservation and Resources Enforcement and DOFAW assisted with maintenance and management of the range. The “Need for a hunting license” rule was removed for the range, so all shooters can use the range and a mandatory check-in for shooters was established to address HRS13-106 restricted watershed access issue (Image 1 see exhibit 4).

Game Bird rearing and release program

Objectives: support sport hunting of Game birds and supplement natural game bird populations through purchase of select gamebird species for rearing and release in PHA and safety zones.

Accomplishment: Maintained and repurposed old Nene rearing fly ways near Gil Kahele State Recreation Area for the game bird rearing and release flyways. Used funds to manage facilities near rearing houses to help in the management the work. (Image 2 see exhibit 4). 100 Ringneck Pheasents hens were purchased ans reared in the pens and a 150 chukars were released in Mauna Kea Unit G and A and Kapapala.

Game Operations and Maintenance:

Objective: Conduct predator control activities, the maintenance of game-related facilities such as guzzlers/ hunter check stations and maintenance of hunter access roads.

Accomplishment: A few of operations and maintenance activities were accomplished with some use of WRF monies. WRF monies were used to pay utility bills, supporting the administrative side of the game program, and to maintain/repurpose existing game bird rearing fly ways and old bird rearing facilities. A consultant was hired to complete a survey of metes and bounds on roads in Kapapala Cooperative Game Management Area. The survey will be done for a Land Division Revocable permit land transfer. This will provide hunter access to Kau Forest Reserve.

Future Plans and Projects

- Replace boundary and safety zone signs in public hunting areas PHA (\$2,000 10% WRF).
- Support game bird facilities and game bird rearing activities (\$8,500 100%WRF)
- Expand and improve game bird release program (\$8,500 100% WRF)
- Weed control and habitat improvements in PHA (\$13,000 contract %50WRF).
- Check station, roads, trails and water unit maintenance in PHA (\$25,000 50%WFR).
- Fill position of half-time general laborer (\$42,000 50%fte 100% WRF)

ADMINISTRATION (for maps and photos see exhibit 5.)

- *Objective* assist and maintain a recreational public hunting program that does not threaten the persistence of native species and ecosystems in Hawaii. Public hunting provides a useful tool in controlling game mammals on public and private lands where control is needed, and funds are scarce. The Hawaii Division of Forestry and Wildlife (DOFAW) public hunting program supports and facilitates hunting on public and private lands by providing a structured program that promotes and encourages participation. The program aims to direct hunting toward less ecologically sensitive areas, while at the same providing structured hunter access to more remote/pristine sites where recreational hunting can help to control game mammal populations.
- The Game Program Planning and Coordination section provides staff and procedures to ensure that the State meets its responsibilities for participation in the Federal Assistance program, including long-term planning, compliance, record keeping, reporting, field staff supervision, and coordination of game Federal Assistance activities with the Service and other State and agency programs. Coordination of State and Federal funds for the program helps ensure continued participation in the Pittman-Robertson Federal Assistance program and thereby improves hunting and increases sport hunting opportunities, protect, and enhance wildlife habitat on both public and private land, improve the integration of game management activities with other compatible or competing uses, and provides information on the wise management and appropriate use of game species.

Notification of Hunting Season Openings and Changes

- Several legal notices announcing new animal control opportunities for hunters were produced, and a series of announcements and news releases were produced for hunting seasons through out the year. All lottery hunts were conducted on Lanai for FY 2023. All other statewide hunting opportunities were offered as per the divisions hunting regulations.

Implementation of Communication Strategies to Improve Hunter Recruitment and Retention

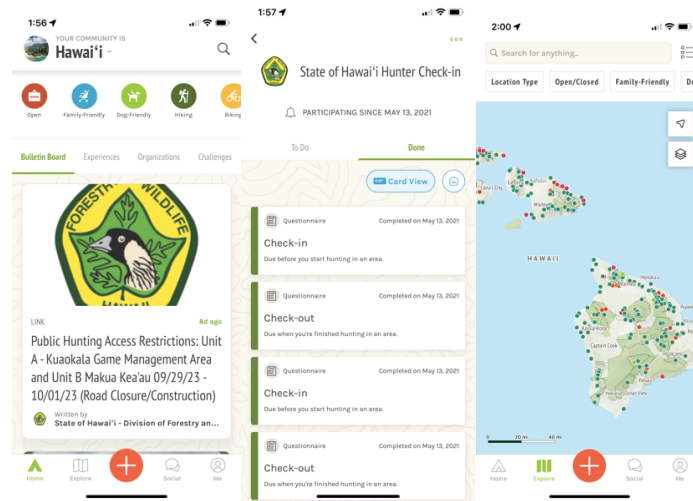
- The quarterly informational newsletter was published in Jan 2022 and Feb 2022. The *Go Hunt Hawaii 'i* newsletter is an informational newsletter to connect hunters and DOFAW resource managers. This newsletter is available online on the DOFAW website. <https://dlnr.hawaii.gov/recreation/hunting/go-hunt-hawaii-newsletter/>
- A listserv was created for those who are interested in signing up to receive hunting related updates, announcements, and newsletters. There are now 19,410 people signed up on this mailing list. People may sign up online (dlnr.hawaii.gov/recreation/hunting/). Sign-up sheets are also available at all DOFAW offices and at every hunter education class.

Public Engagement in Game Management

- Public hunters continue to assist the Division with Game Bird surveys on Maua Kea. 73 transects were selected at Kapapala and 68 selected on Mauna Kea. Game Bird Surveys are conducted with and without dogs each year. Data has shown that using dogs produce more accurate estimates of game birds then without the use of dogs. During 2023 all data collected was entered into a Survey 123 application so that surveyors can electronically enter data when conducting field surveys with providing easier analysis. Ongoing efforts are underway to enhance the survey to capture the most best fit data while adding additional survey locations throughout the state.
- State-wide Hunting License Sales Administration and Coordination
- Clerical staff assisted with license sales and dissemination of information pertinent for upcoming season information.
- Conducted a Conservation and Game bird Stamp contest for stamp to be used as stamps on the new years hunting license. Chosen artists can receive up to a \$1000.00 award.
- No funds were used for travel reimbursements for Game Management Advisory Commission. Virtual Platforms were utilized. Future meetings have a requirement for an in-person option and future travel reimbursements will be processed via this fund.
- Public hunters participated in our state-wide game bird rear and release project which has been successful over the years with continued participation. Many relationships have been developed via this program.
- Public consultation has been sought for new public hunting areas that are being proposed.

Outdoor Hunting and Trails Mobile Application

- Continue contract administration and project development with Trailhead Labs, Inc., for the maintenance and enhancement of a hunting and trail program mobile application. Application was launched in July 2021. Hunters have been utilizing the platform for it's electronic hunter check in and harvest reporting feature. Prior year funds supported this project. Over 2000 hunters have used the electronic hunter check in and 1000's more using the app for other recreational activities. <https://dlnr.hawaii.gov/dofaw/app/>. Currently, DOFW is developing a DOCARE officer login for easy access to hunter check station data for enforcement purposes. Project supported by the Wildlife Revolving Fund.



Electronic Hunting Tags and Permit System

- Continue project development with web vendor Tyler Technologies, Inc. regarding the online hunting tag and permit portal hosted on GOHUNT HAWAII. The new system was made available to public to purchase their tags and permits in May 2022. Over 1000 online permits and tags were sold during FY23 with an estimated revenue of \$126,000.00. A new convenient way for hunters to acquire Tags and Permits. Revenues from the sales of hunting license and tags support this project. This new system has been updated to allow a shopping cart style check out which allows a public hunter to purchase several tags at a time with no convenience fees passed on to the user.

Planning documents, Agreements, and Research

- Funding was used to support a research project through the University of Hawaii at Manoa. Project titled “Ungulate Distribution Models for Conservation and Recreational Hunting : Hawaii Island”. The goal of this project is to develop a management prioritization model that identifies areas for conservation and areas for public accessible hunting and recreation based on validated ungulate distribution models for the main Hawaiian Islands. *Objectives*: Complete investigations to acquire, map and analyze ungulate distribution data on Hawai‘i island and to create prioritization models for conservation and recreational hunting on Hawai‘i island. This project is currently underway and will be complete in 2024.
- Funding supported an ongoing project for the Kanaio Forestry and Wildlife Area, Maui. DOFAW proposes to establish a Forestry and Wildlife Area on State and privately-owned lands in southwestern Maui (Figure 1). The approximately 7,460.66-acre Kanaio Forestry and Wildlife Area (KFWA) would be located within the *ahupua‘a* (traditional land divisions) of Kanaio, Kalo‘i, Kaunuahe, and Papaka Kai in the traditional *moku* (district) of Honua‘ula (now the district of Makawao) on the island of Maui [TMK: (2) 2-1-002:001 and 2-1-004:006]. The proposed KFWA is located on the southwestern flank of the shield dome volcano of Haleakalā. It is bordered to the north by the Pi‘ilani Highway, to the west by ‘Ulupalakua Ranch lands, to the east by the Auwahi wind farm, and extends to the south down to the shoreline. The proposed KFWA ranges from sea level to approximately 1,600 feet (500 meters) in elevation and contains highly disturbed habitats with pockets of remnant native forest, including several threatened and endangered species and a multitude of traditional Hawaiian cultural resources.

The goals for the establishment of the KFWA are to:

1. Protect the area’s natural and cultural resources.
2. Provide opportunities for public hunting to reduced invasive ungulates.
3. Maintain public access to public lands and coastline.

Once established, the KFWA may consist of both public and private lands with the private lands being designated as a Game Management Area (GMA) and the state-owned lands designated as a Forest Reserve (through due process as per Hawaii Revised Statutes Chapter 183, Forest Reserves, Water Development, Zoning). DOFAW is proposing compatible uses for the proposed Forest Reserve area. These will include hunting, threatened and endangered species management, and cultural site and native ecosystem protection.

WILDLIFE REVOLVING FUND EXPENDITURES

Table 1. Operating, personnel, claims, and contracts per branch or district.

Oahu Administration	Expenditures	Maui	Expenditures
Operating	\$25,055.76	Operating	\$47,056.71
Personnel	\$0.00	Personnel	\$20,205.46
Claims	\$100,685.74	Claims	\$90,192.54
Contracts	\$0.00	Contracts	\$0.00
Total	\$125,741.50	Total	\$157,454.71
Oahu			
Operating	\$49,713.57	Operating	\$0.00
Personnel	\$0.00	Personnel	\$0.00
Claims	\$54,835.00	Claims	\$0.00
Contracts	\$0.00	Contracts	\$0.00
Total	\$104,548.57	Total	\$0.00
Molokai			
West Hawaii			
Operating	\$10,000	Operating	\$33,382.30
Personnel	\$0.00	Personnel	\$87,186.64
Claims	\$12,005.58	Claims	\$1828.50
Contracts	\$0.00	Contracts	\$0.00
Total	\$22,005.58	Total	\$122,397.44
Lanai			
East Hawaii			
Operating	\$45,711.08	Operating	\$25,717.19
Personnel	\$28,726.56	Personnel	\$58,805.61
Claims	\$11,725.87	Claims	\$19,802.18
Contracts	\$0.00	Contracts	\$0.00
Total	\$86,163.51	Total	\$104,324.98
Kauai			

Table 2. Fee schedule for hunting licenses, wildlife stamps, applications, permits, and tags for special or lottery hunts.

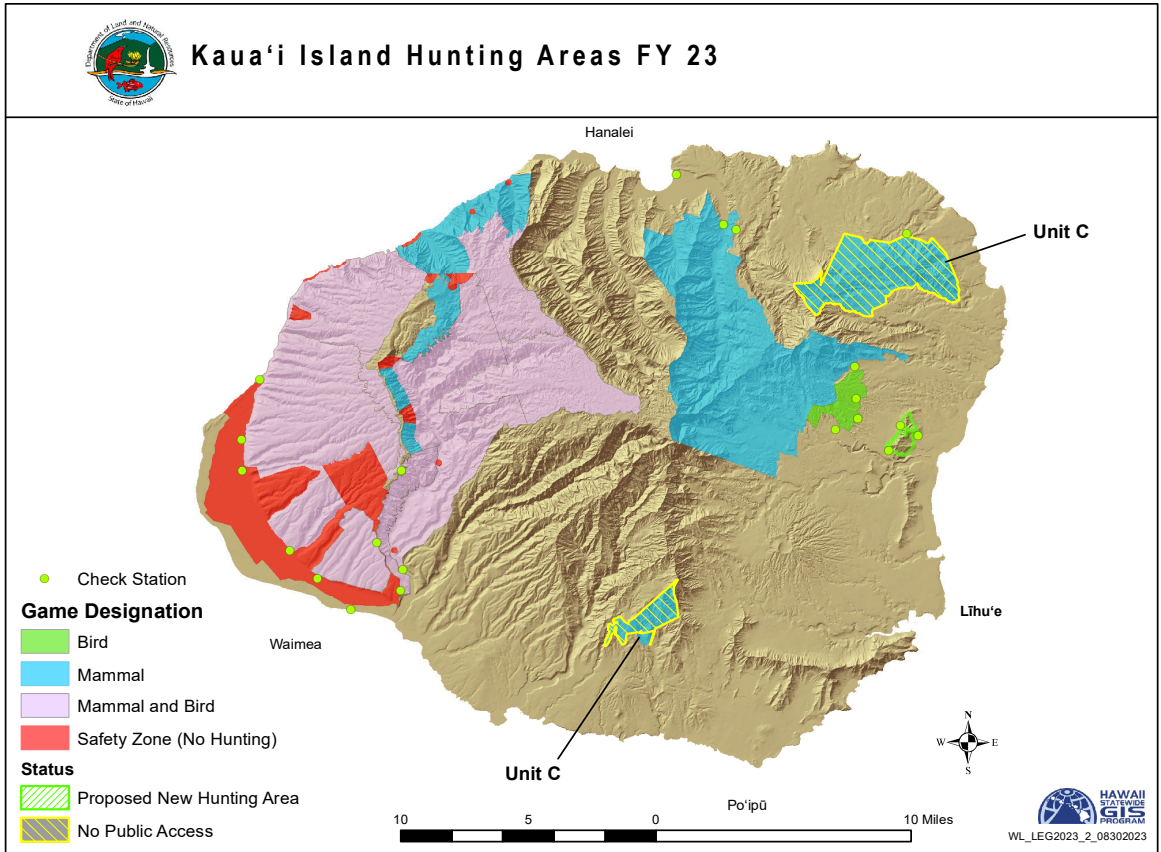
Island	Item	Resident	Non-resident
All islands statewide	Hunting License*	\$10	\$95
	Wildlife Conservation Stamp	\$10	\$10
	Game Bird Stamp	\$10	\$10
	Spring Turkey Tags	\$5	\$20
Kaua'i	Black Tailed Deer Hunts Rifle Tag Application	\$5	\$5
	Rifle Tag	\$10	\$25
	Muzzleloader Permit-Tag	\$5	\$25
	Archery Permit Tag	\$5	\$25
	Feral Goat Hunts Rifle Lottery Tag Applications (Unit B)	\$5	\$10
	Rifle Lottery Tags (Unit B)	\$10	\$25
	Muzzleloader Permit-Tags (Units A & F)	\$5	\$25
	Annual Archery Permit (Units G, F, & K)	\$5	\$25
	Feral Pig Hunts Season Permit	\$5	\$25
	Special Hunts Application	\$5	\$5
	Goat/Deer/Pig Permit (Units E & H)	\$10	\$25
	Goat/Pig Animal Control (Unit G)	\$5	\$25
Lāna'i	Mouflon Sheep Season Lottery Application	\$10	\$10
	Mouflon Sheep Season Tag	\$20	\$125
	Axis Deer Season Lottery Application	\$10	\$10
	Axis Deer Season Tag	\$20	\$125
Hawai'i	Pu'u Wa'awa'a Feral Sheep or Goat Tag	\$10	\$25
	Pu'u Anahulu Feral Sheep or Goat Tag	\$10	\$25

*Free to all Hawai'i residents 65 years or older and to all persons with Hansen's disease who are residents of Kalaupapa, Moloka'i.

ATTACHMENT I: WILDLIFE REVOLVING FUND EXPENDITURE CATEGORIES

1. Development, improvement, and management of existing and new public hunting and game management facilities including installing or maintaining hunter access roads, checking stations, fences, gates, stiles, cattle guards, entry/safety/boundary signs and markers, parking lots, sanitary facilities, water tanks, and campsites.
2. Development, improvement, and management of existing and new wildlife sanctuary facilities including fences, moats, water control structures, pumps, ditches, nesting sites, holding pens, boardwalks, viewing kiosks, watering devices, parking lots, sanitary facilities, and entry and interpretive signs.
3. Wildlife habitat improvements including game bird and mammal watering units, food plots, vegetation clearing and mowing; non-game/endangered species enclosures, exclosures, noxious weed control, mowing and nest sites; and wildlife predator control, water quality testing, and rehabilitation.
4. Personnel hires for wildlife management and hunter education including Wildlife Management Assistants and General Laborers (for hunter checking station operation, public hunting area management, pest plant control, predator control, habitat development, and posting signs and markers), computer technicians (for public hunting lotteries), and hunter education specialists.
5. Wildlife management equipment including tractors, bulldozers, all-terrain vehicles, collecting arms, radios, outboard motors, small boats, binoculars, trucks, and 4-wheel drive vehicles.
6. Development and operation of public shooting ranges in conjunction with the Hunter Education Program.
7. Research, surveys, and inventories for game and non-game/endangered species, including rental of helicopters, infrared technology, temporary hires, equipment rental, materials and supplies, and contracts for studies (game birds, forest birds, waterbirds, seabirds, Hawaiian bat, owls, disease, genetics, food habits, ungulates, limiting factors, etc.).
8. Public education on wildlife management including development of the “Wilderness Watch” program, providing maps and area informational leaflets, interpretative facilities at game management areas and wildlife sanctuaries, and technical assistance to the public on wildlife management.
9. Rental of land for public hunting and wildlife management.
10. Law enforcement.

Exhibit 1.

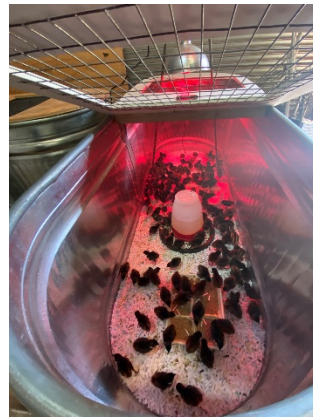




Kekaha Range Mowing



Game bird rearing





New fly pens constructed, Kauai

Exhibit 2.

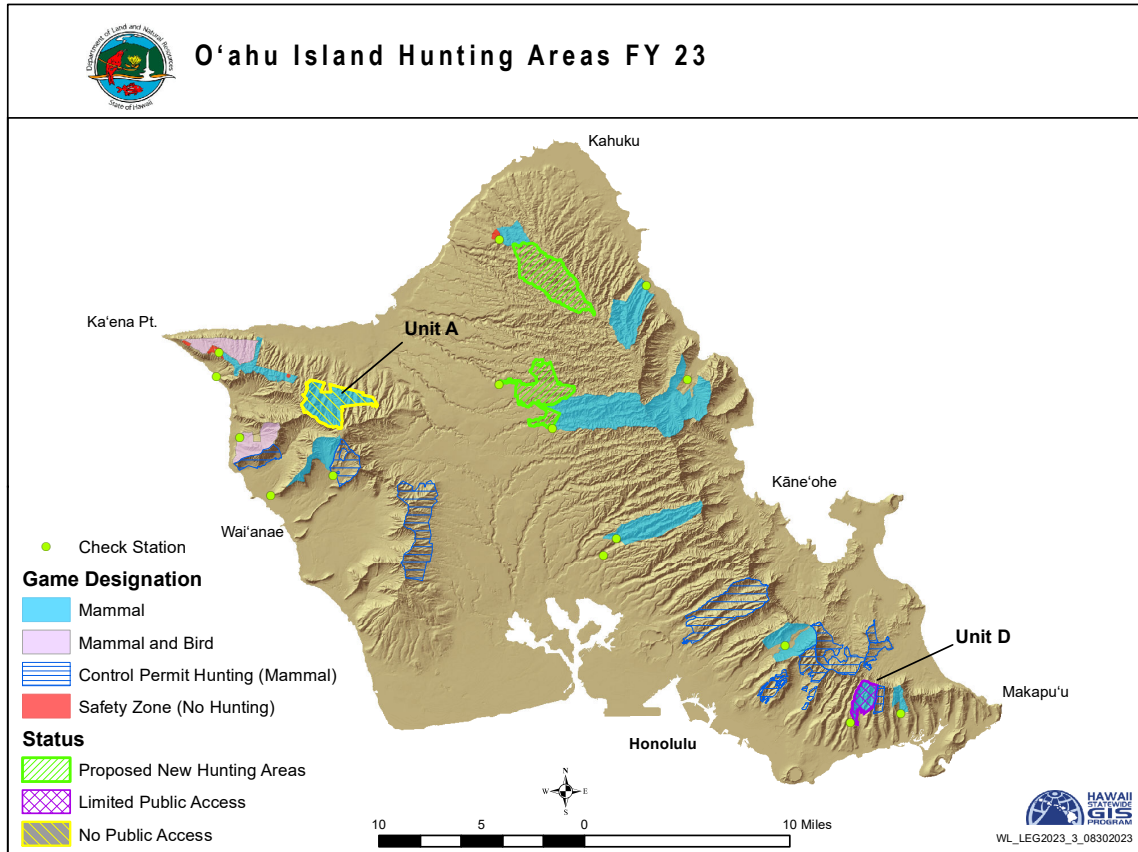




Figure 1. Hunter volunteers and Forestry & Wildlife Staff release pen raised game birds into the Kuaokala GMA for the FY23 Game Bird Hunting Season.



Figure 2. Starting from left to right, the Polaris Ranger, Kubota with rotary mower, Kubota with flail mower. This equipment is primarily used to help maintain all habitat and management areas for public hunting.



Figure 3. Public Hunters and Forestry & Wildlife Staff setting up transport boxes, feed bags, and other equipment to load up mature game birds for release.



Figure 4. Melanistic “Blue” Pheasant in a transport box. These Ruffland Kennel Cackle boxes have been very useful in various stages of the rearing process. Moving birds to larger brooder boxes, moving birds into fly pens, and finally releasing them into the game bird hunting area. Cackle boxes allow for up to (6) males to comfortably fit and not ruin any plumage or tail feathers in transport.



Figure 5. New Brooder Box Systems (GQF 0534 Universal Box Brooder). A total of (6) were purchased to improve the rearing process of when the day-old chicks first arrive on island. Incorporated with self-regulating thermostats, outside feeders/waterers, and sliding soiled trays allows for a much easier maintenance. The program will investigate obtaining more of these brooder systems since there was a higher survival rate using these compared to the aluminum troughs from last year. Troughs still prove to be useful when the chicks pass 4 weeks of age.



Figure 6. A shot inside of the Makiki Baseyard Brooder house with feed trough style brooders. Each brooder trough is fixed with head lamps, waterers, feeders, and wood shavings.

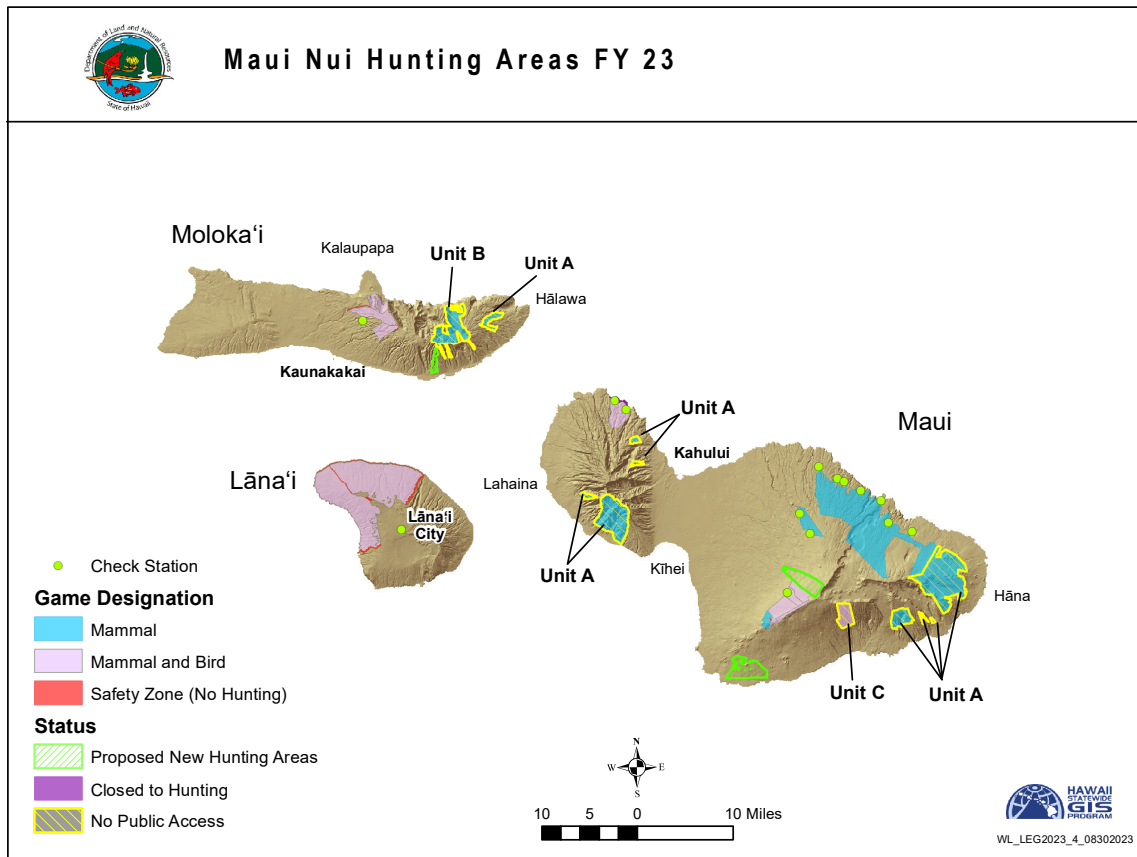


Figure 7. DOFAW managed Flight Pens. Volunteer Public Hunters help in all stages of the rearing program.



Figure 8. Volunteer hunters and their families assist with clearing and maintaining access roads leading to the hunting areas. Their dedication and enjoyment to the game bird program is immeasurable!

Exhibit 3



Youth hunt on the island of Lāna'i

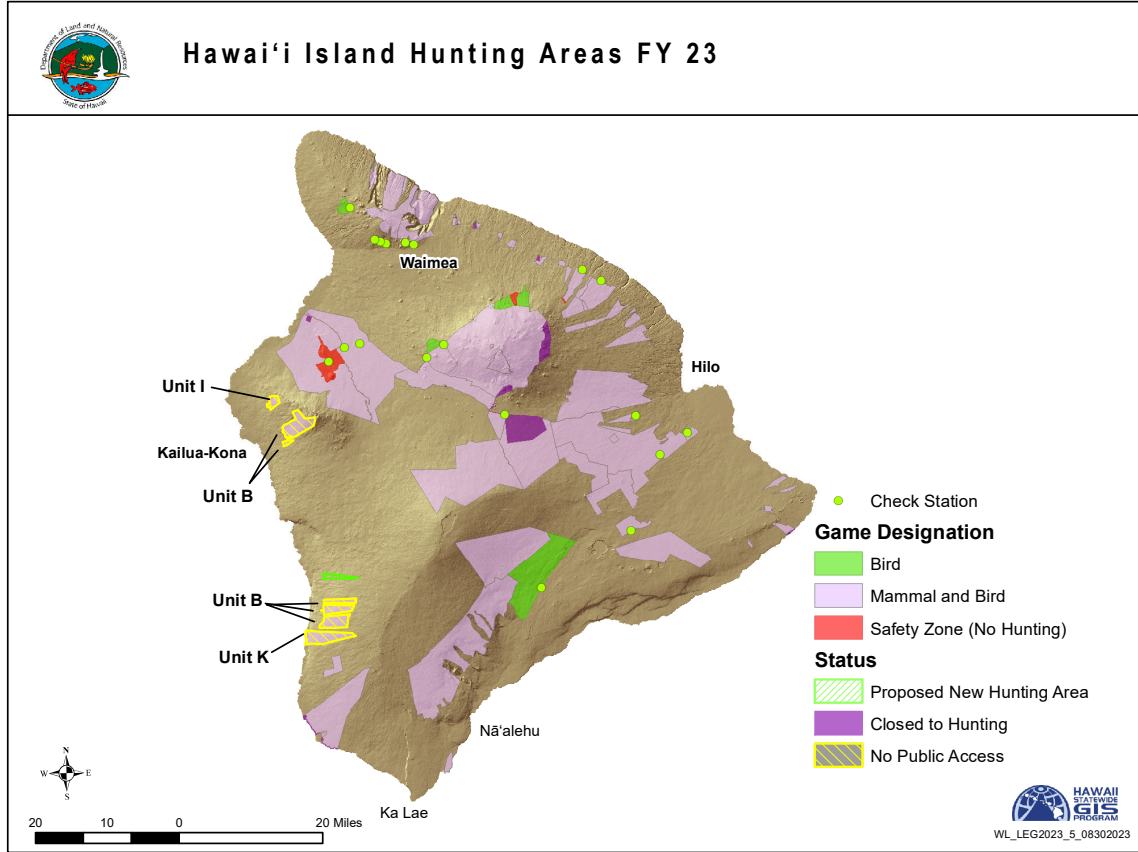


Roads maintained on Lānaʻi



Mowing for game birds

Exhibit 4.



Mile Marker 16 Check in station



Game bird rearing and release project

Wildlife Conservation and game bird stamp awards 2023. Each artist is awarded up to \$1000.00.

Artist JoAnna Maney



Artist Timothy Turenne



hawaii.gov Department of Land and Natural Resources Announcements 1 Login

Go Hunt, Hawaii

Hawaii's official hunting resource

Home Classes - Events Apply for Hunts Purchase Tags & Permits Documents Help

Purchase Tags & Permits

Select a tag/permit to purchase.

After purchasing tags/permits you will be required to check in prior to hunting. You can check in physically at an established hunter check in station OR you can check in using our new mobile application called OuterSpatial. You can download the mobile app from the [Apple Store](#) or [Google Play Store](#). Once downloaded, navigate to the Hawaii Community and press the red plus button to check in. Certain hunting units have bad cellular service so it is recommended that the mobile app be fully installed prior to arrival. The mobile app will work offline after proper installation and registration. For more information please go to the [DLNR DOFAW website](#).

Hawaii Island

Tag/Permit	Resident	Non-Resident	Purchase Dates	Action
Turkey Tag	\$5.00	\$20.00	01/01/2023-04/15/2023	
Archery Tag				
Puu Anahulu Archery Ram Tag (daily bag limit (1) ram)	\$10.00	\$25.00	01/01/2023-06/26/2023	
Puu Anahulu Archery goat tag (daily bag limit (2) goats any sex)	\$10.00	\$25.00	01/01/2023-06/26/2023	
Puuwaawaa Makai Archery Special Control Permit (daily bag limit (1) non-typical ram)	\$10.00	\$25.00	06/01/2023-07/31/2023	
Puuwaawaa Archery Special Control Goat Permit (daily bag limit (3) goats)	\$10.00	\$25.00	06/01/2023-07/31/2023	

Online hunting Tag and Permit Portal developed by Tyler Technologies