

DAVID Y. IGE
GOVERNOR OF
HAWAII



DEPT. COMM. NO. 72

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 COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

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

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 2, 2019

The Honorable Ronald D. Kouchi,
President
and Members of the Senate
Thirtieth State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki, Speaker
and Members of the House of
Representatives
Thirtieth State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Relating To The Wildlife Revolving Fund report, as required by Section 183D-10.5, Hawaii Revised Statutes (HRS). In accordance with Section 93-16, HRS, a copy of this report has been transmitted to the Legislative Reference Bureau and the report may be viewed electronically at <http://files.hawaii.gov/dlnr/reports-to-the-legislature/2020/FW20-Wildlife-Revolving-Fund-FY19.pdf>.

Sincerely,

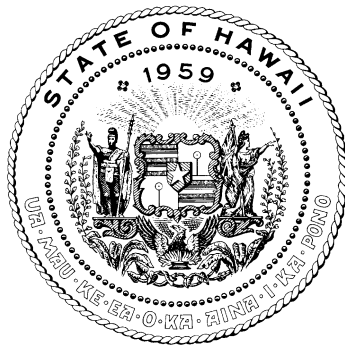
A handwritten signature in blue ink, appearing to read "Suzanne D. Case".

SUZANNE D. CASE
Chairperson

Enclosure

**REPORT TO THE THIRTIETH LEGISLATURE
STATE OF HAWAI‘I
2020 REGULAR SESSION**

**RELATING TO THE WILDLIFE REVOLVING FUND
FISCAL YEAR 2019**



Prepared by

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

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

November 2019

**RELATING TO THE WILDLIFE REVOLVING FUND
FISCAL YEAR 2019**

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 in order 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) 2019 the major source of revenue was hunting license sales followed by the sale of game tags. Revenues meet the Department’s authorized budget ceiling for the WRF of \$637,857.00. New expenditures totaled \$444,757.61. The cash balance at the end of FY 2019 amounted to \$685,259.06, with outstanding encumbrances of \$124,585.76 resulting in unencumbered cash for carryover of \$560,673.30.

Status of S-343

Beginning cash balance of fund on July 1, 2019	\$516,685.54
Revenues during FY 2019	\$605,642.42
Cash transfer from FY 2018	\$7,688.71
Expenditures during FY 2019	- \$444,757.61
Cash balance as of June 30, 2019	\$685,259.06
Unpaid encumbrances as of June 30, 2019	-\$124,585.76
Unencumbered cash for carryover as of June 30, 2019	\$560,673.30

Summary of Revenues FY 2019

Hunting guide licenses and lottery	\$24,049.00
Game bird farmer licenses	\$4,475.00
Hunting licenses with wildlife conservation stamp	\$323,906.00
Wildlife conservation stamps	\$1,230.00
Game bird stamps	\$43,802.00
Game tags	\$207,100.00
Interest	\$1,080.42
Total Revenue for FY 2019	\$605,642.42

Summary of Expenditures FY 2019

Personnel	\$180,733.29
Operations	\$258,100.10
Indirect costs	\$5,924.22
Total Expenditures	\$444,757.61

Summary of Outstanding Claims FY 2019

Operations claims	\$133,872.51
Amount expended	\$15,454.56
Total remaining balance of outstanding claims	\$118,417.95

FUNDING PRIORITIES

The WRF has been an important portion of the overall budget to meet obligations of state match and operating and salary expenses for hunting program and wildlife management projects. Because the major sources of revenue for the WRF come from direct charges to hunters, priority is given to expenditures which benefit this user group. A formal hunting rule change has been conducted and was approved in May of 2015. Therefore, the sale of stamps, game tags, and application fees may be assessed to hunters by species, area, and season chosen to hunt.

In budgeting for the WRF, a policy of allotting at least 85% of the budget for the hunting program has been in place and followed. Up to 15% of the budget may be used for nongame and wildlife sanctuary management projects that may have dual benefits to game species and nongame species.

Section 183D-10.5(e), HRS, also requires that the State first use WRF monies "to maximize the State's participation to secure federal funds under the Pittman-Robertson Federal Aid in Wildlife Restoration Act." Consequently, a priority was given to those expenditures that provided the state match for Pittman-Robertson (PR) projects.

The allocation of operating funds to the Division of Forestry and Wildlife's (DOFAW's) Branch Offices was done on a lump sum basis to be used on eligible projects. The operating funds were allotted to the Branch Offices based on the respective Branch wildlife program size and complexity and amount of revenue generated from license fees.

PROCESS USED

1. The Department's Fiscal Office and DOFAW coordinated to determine the amount of the WRF available for allocation to DOFAW's Branch Offices.
2. At the beginning of each fiscal year, a portion of the WRF budget is allocated to each DOFAW Branch Office and to Honolulu Administrative Staff for projects. A portion of the funds are allocated for temporary personnel to maintain wildlife program functions and to pay budgeted add-on salary costs to assist with wildlife projects.
3. Each Branch Office collaborates in the development of the overall annual WRF budget to benefit the resources and resource users, all within the criteria of compliance with the purpose of the WRF and the necessity to provide state match requirements for PR projects.
4. An emphasis was placed on using the WRF for essential expenditures to provide support for public hunting opportunities.
5. All expenditures are identified and coded as "WILDLIFE REVOLVING FUND: S-19-343" to facilitate tracking and accountability.
6. Expenditures complied with approved categories of expenditures for the WRF as established by the Board of Land and Natural Resources on August 13, 1993 (see Attachment I appended).

HUNTING LICENSE SALES OVERVIEW

Overall, Hawai'i hunting license sales and sale of non-resident licenses have shown a steady increase since 2005 and 2009, respectively (Figure 1 and 2). Since this combined revenue is earmarked in the WRF and used to benefit game management and hunting programs, it suggests that hunter recruitment, hunter retention, and hunting tourism programs be actively promoted.

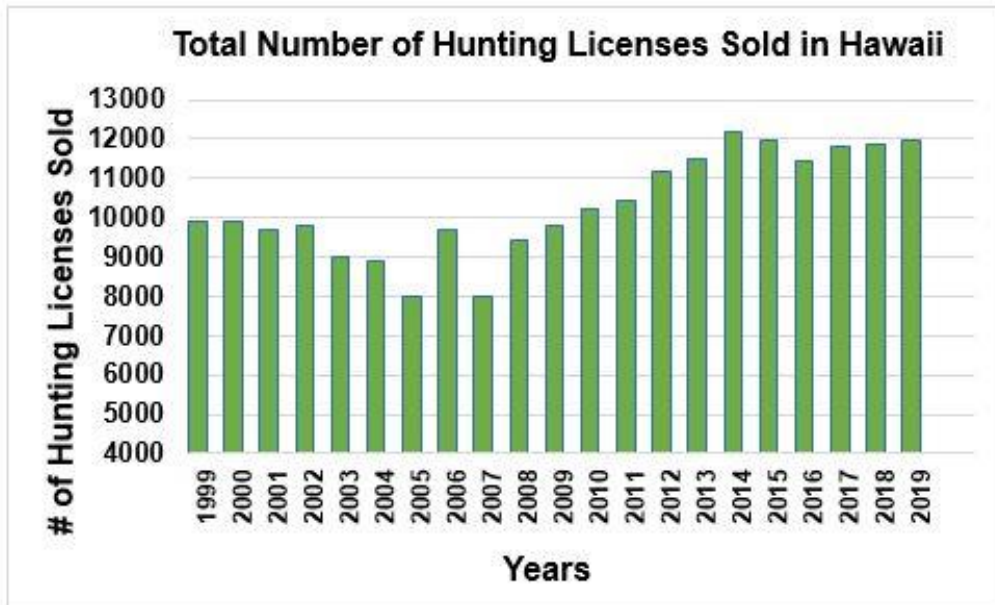


Figure 1. The total number of hunting licenses sold in the State of Hawai'i per fiscal year (1999 – 2019).

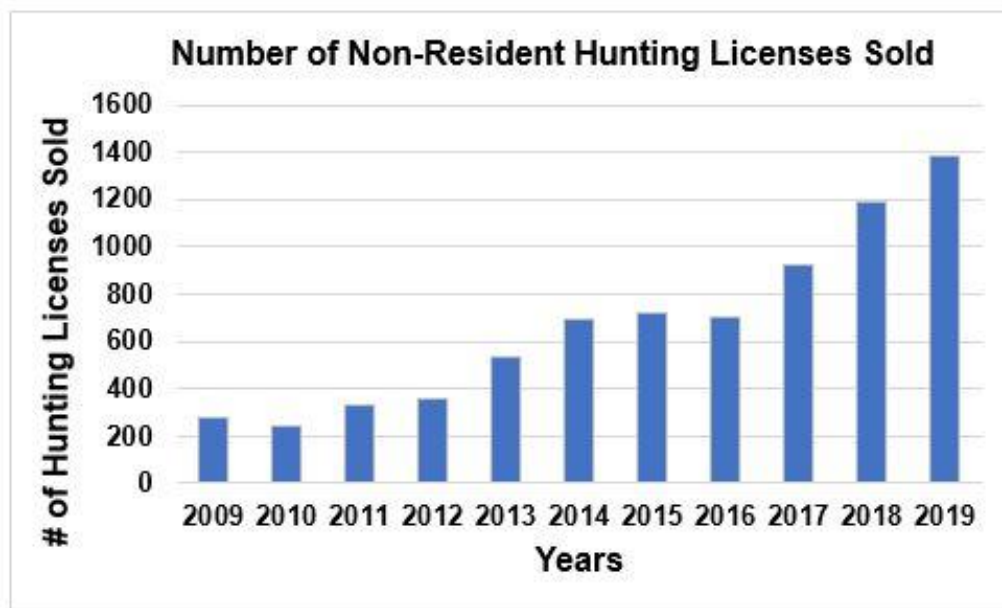


Figure 2. The total number of non-resident hunting licenses sold per fiscal year (2009 – 2019).

A large number of licensed hunters are residents of Hawai‘i Island, followed by O‘ahu, Kaua‘i, and Maui (Figure 3). It is important to note that hunters from any island may be hunting on neighboring islands where they do not reside. For instance, even though the number of licensed resident hunters on Lāna‘i is low, many hunters from neighboring islands hunt on Lāna‘i.

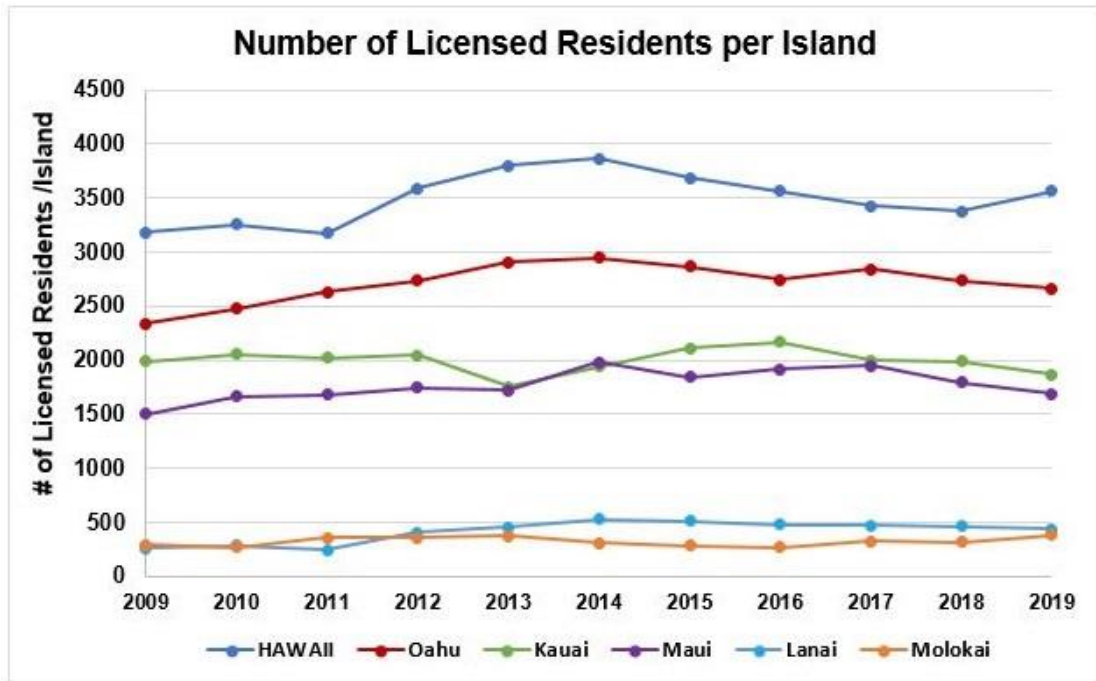


Figure 3. The total number of residents with a hunting license per island for fiscal years 2009 – 2019.

Interestingly, even though most licensed hunters are men (90%) versus women (10%), the number of women hunting license holders have been increasing over the past decade whereas the number of men hunting license holders are decreasing (Figure 4).

DOFAW established a \$10 wildlife conservation stamp in 2015 and made it a mandatory part of the general hunting license, effectively increasing the resident license fee purchase price to \$20 (non-resident \$105). Exhibit 13 in Chapters 13-122 and 13-123, Hawai‘i Administrative Rules (HAR), establishes fees for wildlife stamps. Hence a sharp increase in revenues was observed in fiscal year 2016 (Figure 5). For the current fee schedule for hunting licenses, wildlife stamps, applications, permits, and tags for special or lottery hunts see Table 2.

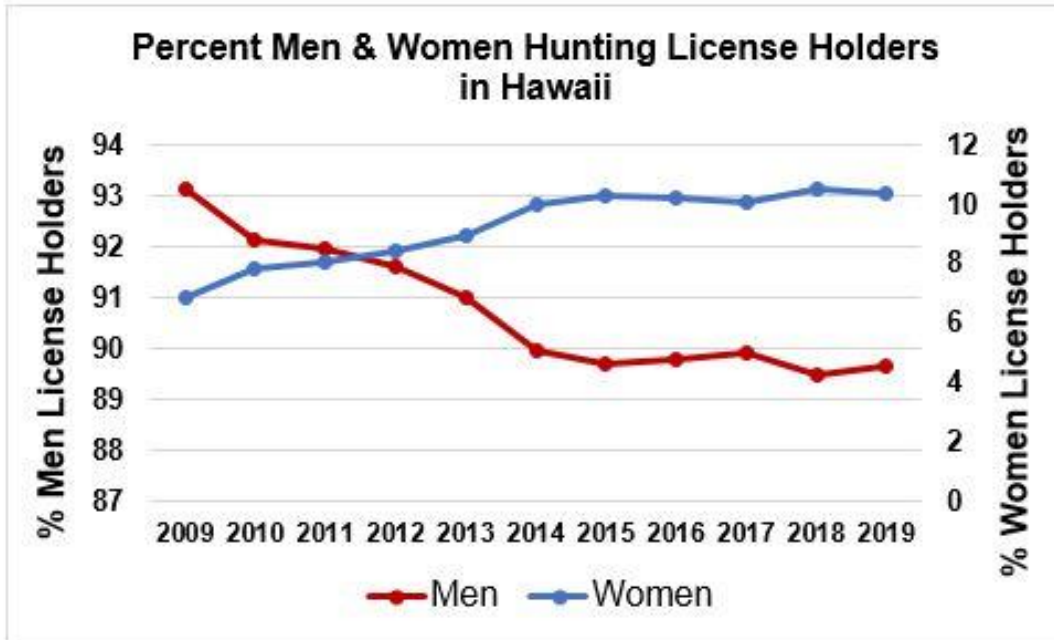


Figure 4. Percent men and women license holders in the State of Hawai‘i for fiscal year 2009 – 2019.

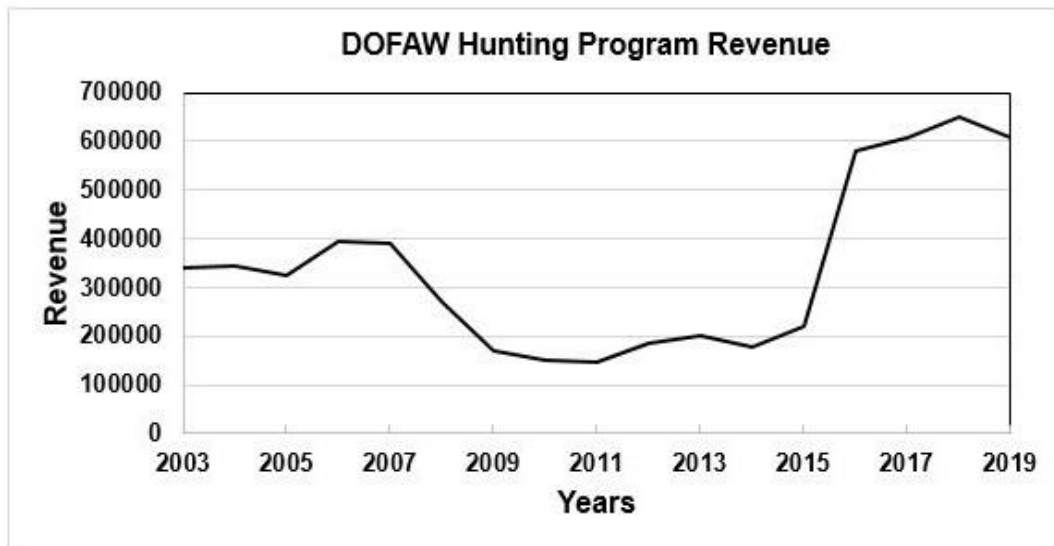
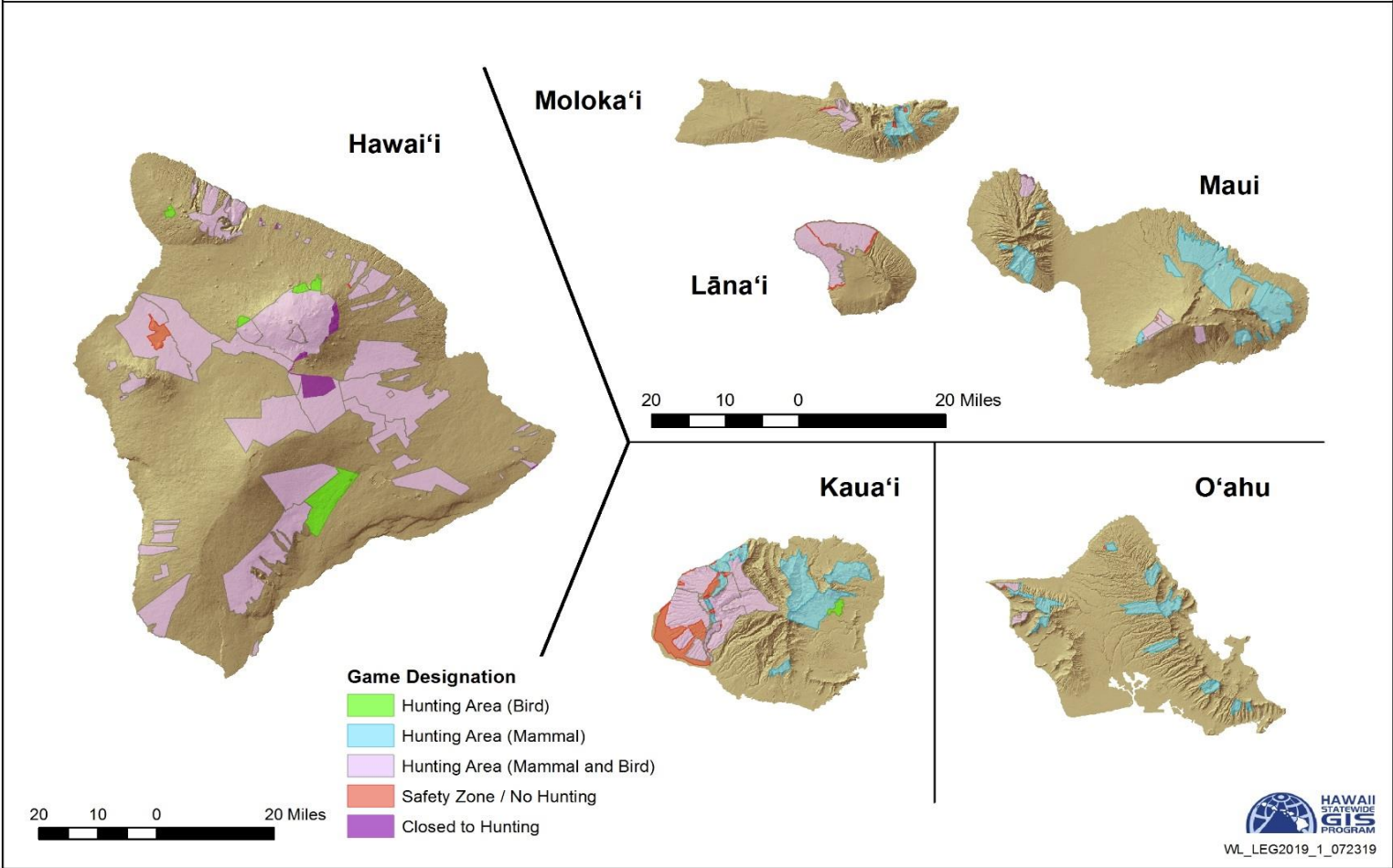


Figure 5. Revenue derived from the WRF for fiscal year 2003 – 2019.

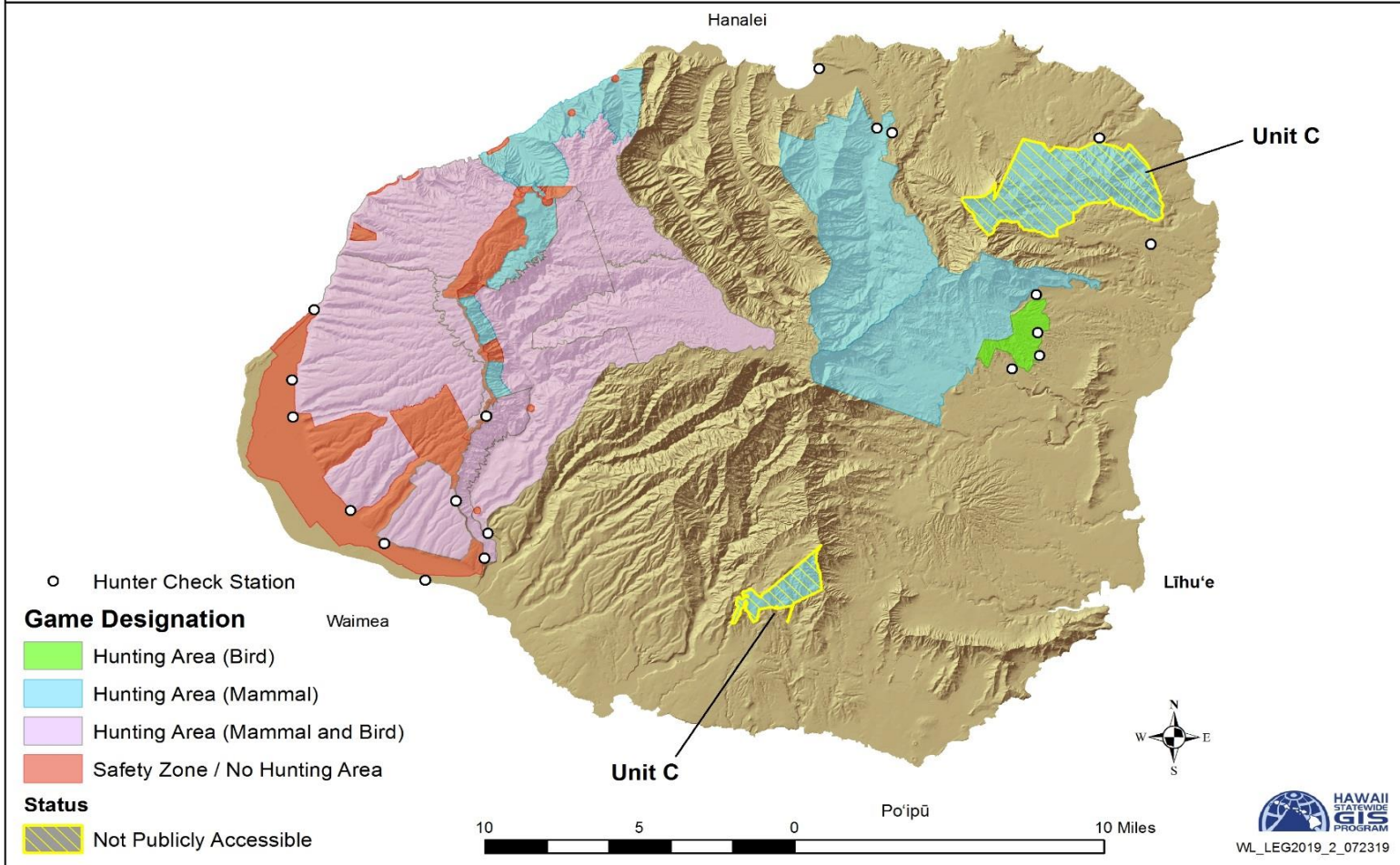


Hunting Areas Statewide FY 2019





Kaua'i Hunting Areas FY 2019



PROGRAM HIGHLIGHTS, ACCOMPLISHMENTS, AND FUTURE PLANS

KAUA‘I BRANCH

Hunting Season Management

Objectives: Provide hunting information to the public through announcements and news releases. Manage public hunting seasons in compliance with Chapter 13-122, HAR, regulating game bird hunting and Chapter 13-123, HAR, regulating game mammal hunting.

Accomplishments: The WRF was used to purchase: 1) U.S. Postal Service bulk stamps to mail game tags and permits to public hunters; 2) Miscellaneous office supplies to operate the public hunting seasons; 3) Bulk fuel to operate game trucks to manage 12 public hunting units; and 4) A 16” dump trailer to transport equipment and materials to the field. The game trucks and tractors were also maintained and repaired when needed.

Commission on Hunting License Sales

Objective: Pay the Kaua‘i hunting license vendors for their commission on the sale of the 2018-2019 Hawai‘i hunting licenses.

Accomplishments: Hunting licenses were available and sold to Kaua‘i license vendors.

Game Bird Release Project

Objectives: Manage and operate the pheasant release project in the Kekaha Game Management Area (KGMA).

Accomplishments: The WRF was used to purchase and raise 750 day-old ring-necked pheasant chicks to be released in the KGMA. The project involved raising the birds for the first two and a half months of age and releasing them throughout the hunting area.

Game Operations and Maintenance

Objectives: Maintain and expand the capacity to manage water units, fences, hunter check stations, and other infrastructure necessary for hunting. Improve game operations and maintenance through additional field staffing, equipment, and supplies.

Accomplishments: The WRF was used to upkeep the 13 hunter public check stations. Game auto-feeders were maintained and operated through the summer and fall season and deactivated one month prior to the open season in November. A total of 30 game bird water guzzlers were in operation and were maintained in the KGMA. Bulk diesel fuel was purchased to operate medium and heavy equipment for game management purposes. This equipment was also maintained and repaired when needed. Lastly, the WRF was used to print hunting information and maps and to pay for utility bills, such as electric, water, and telephones.

Total WRF Expenditure for Kaua‘i Branch: Operating \$32,754.11/Personnel \$28,891.74

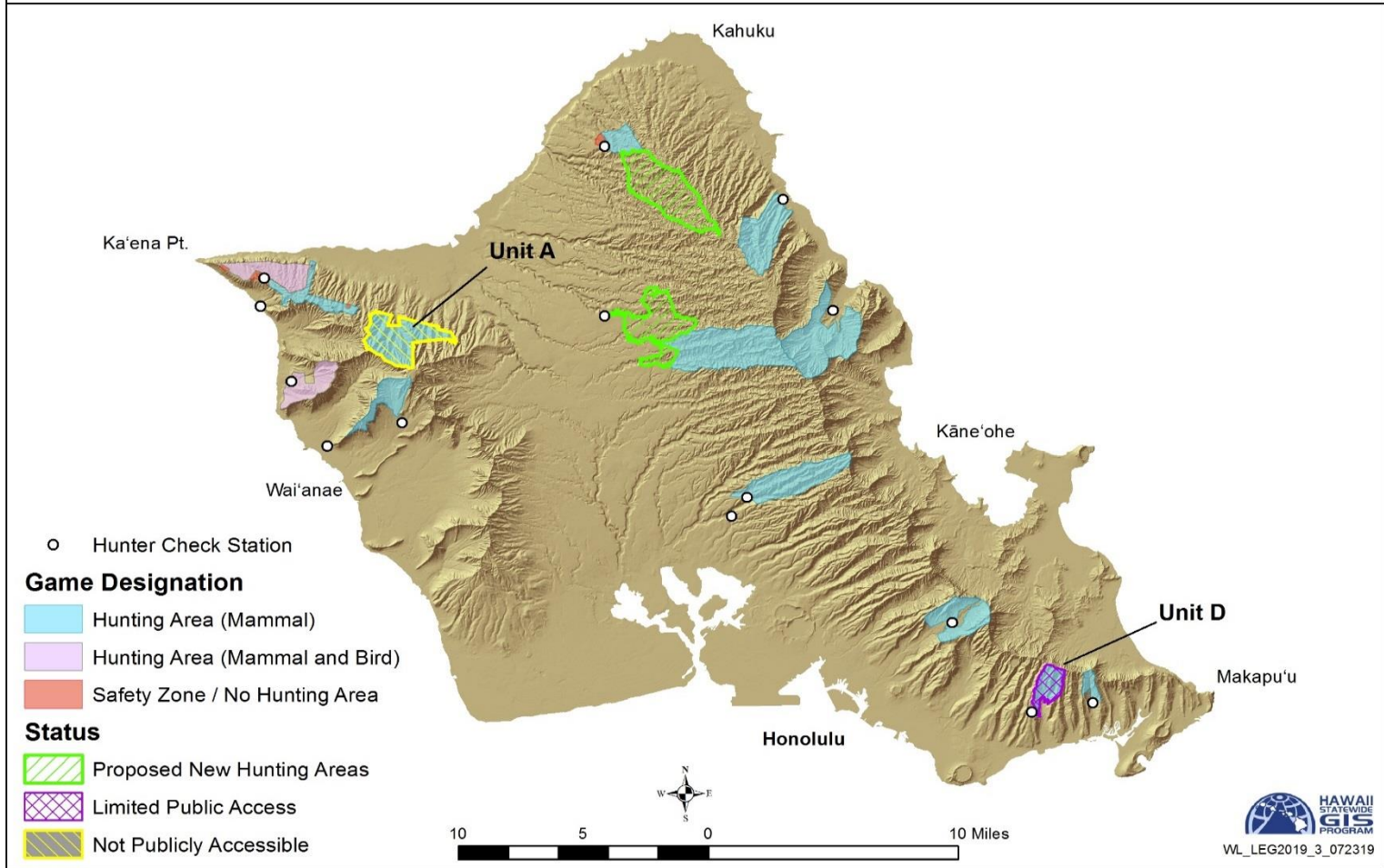
Future Program Plans

1. Provide for the administrative costs, such as printing and publishing of game tags, permits, and announcements of hunting seasons and additions of new hunting areas - \$5,000 (100% WRF).

2. Incremental development of the proposed Hanahanapuni public shooting/archery range - \$20,000 (50% WRF).
3. Continue the artificial game bird release project in the KGMA. Expand on the game bird release project in Hunting Unit I (Wailua GMA) and Unit L (Waimea Heights). Plan, design, and purchase building materials, equipment, and supplies for the construction of a game bird rearing facility - \$30,000 (100% WRF).
4. Maintain game vehicles and equipment to manage and operate the Kaua‘i hunting program - \$30,000 (50% WRF).
5. Purchase of construction materials and supplies to maintain existing game management facilities, including fences, gates, water units, feeding sites, restrooms, storage buildings, and hunter check stations - \$30,000 (50% WRF).
6. Provide air logistical support to conduct surveys, operations, and maintenance of the Kaua‘i game management program - \$20,000 (50% WRF).
7. Provide new hunter access routes to several hunting units. Procure to hire a consultant to assist DOFAW on the Environmental Assessment - \$60,000 (50% WRF).



O'ahu Hunting Areas FY 2019



O‘AHU BRANCH

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:

- Funded a biological technician through the Research Corporation of the University of Hawai‘i to assist with various game related projects, including:
 - Processing and issuing permits for ungulate control/hunting opportunities in forest reserves;
 - Assisting with a game bird propagation project; and
 - Maintaining access locks and gates to control hunt areas.
- Spread approximately 1,500 pounds of game bird feed.
- Repaired and maintained tractors, mowers, and equipment used for road and habitat maintenance activities.
- Constructed four brooder cages and one fly pen (30’ x 60’) for ring-necked pheasant propagation project FY 2019-2020 with volunteer hunters.
- Purchased 225 ring-necked pheasant chicks to raise for release prior to the upcoming FY 2020 game bird season.

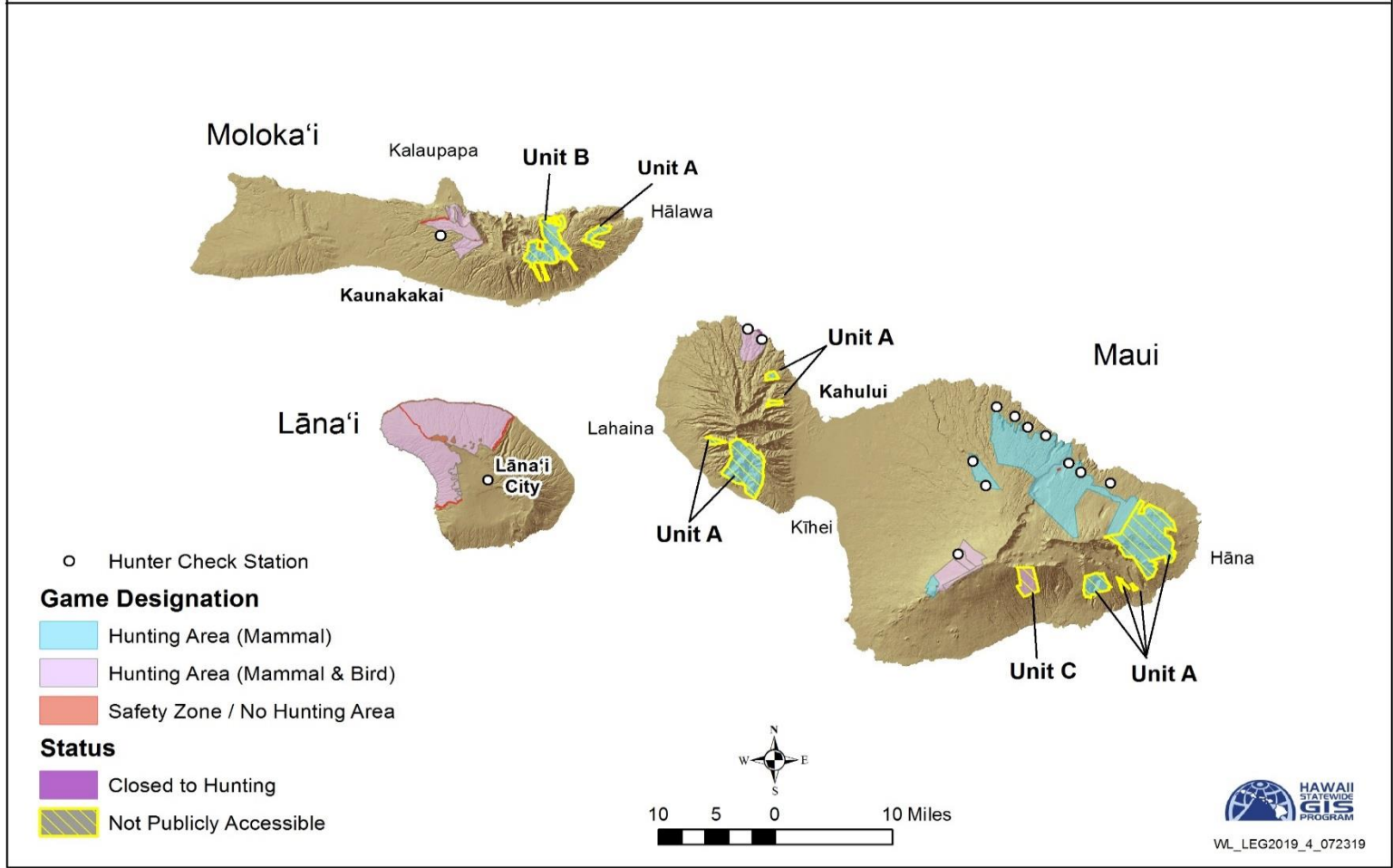
Total WRF Expenditure for O‘ahu Branch: Operating \$26,732.32/Personnel \$12,931.68

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 300 ring-necked pheasants annually - \$5,000 (100% WRF).



Maui, Moloka'i, and Lāna'i Hunting Areas FY 2019



MAUI BRANCH

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. Surveys conducted on the state managed portion of Lānaʻi are used in part for setting upcoming bag limits. Staff from Maui led the survey effort for both the fall and spring surveys. Associated costs for the spring survey only included staff travel. The population levels of Axis deer and Mouflon sheep are for the fall survey only.

Accomplishments: An aerial survey of the Lānaʻi CGMA and the Pūlama Lānaʻi hunting area was conducted on October 8 and 9, 2018. The spring survey was conducted on March 13-14, 2019. Costs associated with the fall aerial survey included rental of a helicopter and staff travel, while the spring aerial survey only included staff travel. Three staff members from the Maui district traveled to Lānaʻi to lead the survey efforts.

Within the Lānaʻi CGMA, a total of 669 Axis deer were counted on the fall survey resulting in an estimated population of 1,800 animals. 440 Mouflon sheep were counted, bringing the estimated population to 1,184 animals.

Within the Pūlama Lānaʻi hunting area, a total of 937 Axis deer were counted on the fall survey, bringing the estimated population to 2,521 animals. 253 Mouflon sheep were counted, resulting in an estimated population of 681 animals.

Personnel Expenses - Lānaʻi

Objective: Maintain and service facilities and field operations on Lānaʻi through the Forestry and Wildlife Worker II position.

Accomplishments: A Forestry and Wildlife Worker II position on Lānaʻi, funded through the WRF, assists the Forestry and Wildlife Technician 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 supports habitat management, game bird and game mammal surveys, enclosure maintenance, and predator control. Hunting activities and hunter check-in on Lānaʻi occurs after normal operating hours. Overtime is paid to the Lānaʻi technician to accommodate hunters participating in both the Mouflon sheep and Axis deer hunts.

Management of the Lottery Hunts - Lānaʻi

Objectives: Process and print documents for the Axis deer and Mouflon sheep hunts on Lānaʻi. Mail instruction sheets and applications for the two hunts to the outer districts. Costs associated with online applications are for both hunts. Provide a conference room to conduct and accommodate the public for the Axis deer and Mouflon sheep lottery. Include appropriate

numbers of staff members to effectively and accurately conduct both hunt lotteries. Provide hunters the necessary tags needed for hunting on Lāna‘i.

Accomplishments: Application cards, instruction sheets, and addendums were printed and distributed to all districts and lotteries conducted. Approximately 50% of applicants applied online for both hunts, resulting in service fees being paid to the contractor of the online program. A conference room was rented to conduct and accommodate the public for the Axis deer and Mouflon sheep lottery. Due to staff shortages on Maui, staff from the outer islands were brought in to assist with conducting the lottery for both hunts. Mouflon sheep and Axis deer tags were purchased during this fiscal period.

Game Mammal Facilities Operations and Maintenance – Maui District

Objectives: Rent dumpster(s) during the Axis deer and Mouflon sheep seasons for hunters to dispose of carcasses. Purchase materials required for the hunting program to function. Provide vehicle maintenance, travel to Lāna‘i for meetings, and travel to outer islands for game related meetings. Provide staff with necessary equipment for the safe transportation of ATVs/UTVs to and from public hunting areas.

Accomplishments: Two dumpsters were rented for each of the two hunts. This provided the hunting community with the facilities to dispose of animal carcasses. Vehicle repairs were charged to this fund, ensuring staff had vehicles available to maintain, repair, and complete wildlife projects and facilities. Axis deer tags were purchased during this period. Staff travelled to the outer islands to attend game related meetings. A trailer was purchased to safely transport ATVs/UTVs to public hunting areas.

Plant Surveys - Lāna‘i

Objective: Conduct plant surveys on the Lāna‘i CGMA for the development of the Lāna‘i Management Plan. The surveys will inform planning by providing updated information about the status and location of threatened and endangered plants, alien invasive species, and important native plant communities.

Accomplishment: Plant surveys within the Lāna‘i CGMA were conducted in Units 1-3 during six trips in FY 2019. Survey tracks and locations of target species were recorded by the Department, Research Corporation of the University of Hawai‘i/Pacific Cooperative Studies Unit, Pūlama Lāna‘i, and other partner staff using GPS. New locations of endangered plants were discovered along with notable stands of native dry forest trees. This information, along with locations of invasive species will be used to plan future management of the Lāna‘i CGMA.

Total WRF Expenditure for Maui Branch: Operating \$87,938.83/Personnel \$82,421.71.

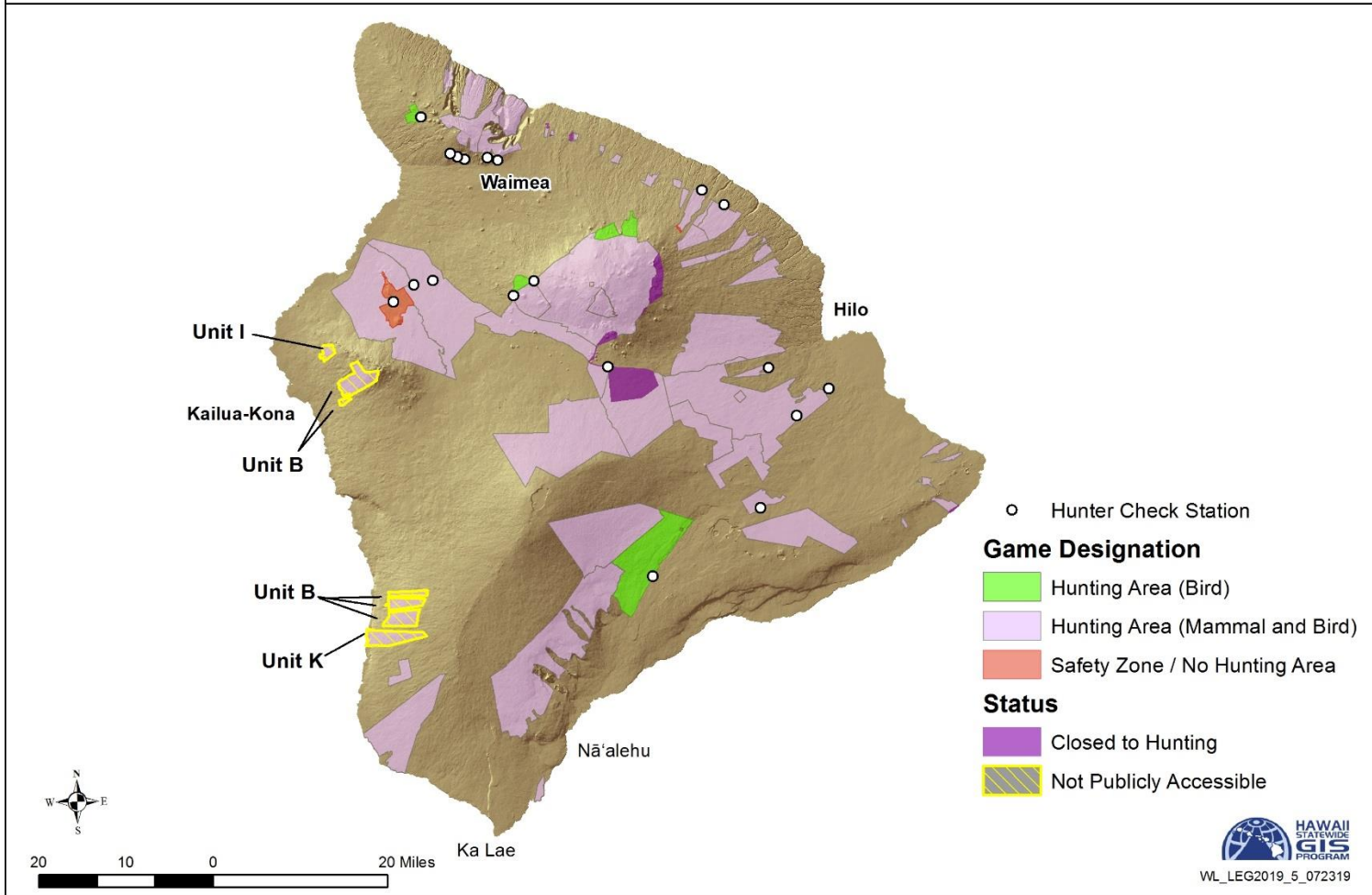
Current and Future Program Plans

1. Fund rental of lease on Lāna‘i - \$35,000 (100% WRF).
2. Fund Forestry and Wildlife Worker II position on Lāna‘i for facility upkeep and maintenance - \$75,000 (100% WRF).
3. Fund Lāna‘i check station overtime for Forestry and Wildlife Technician V position - \$2,000 (100% WRF).
4. Fund game mammal surveys on Lāna‘i - \$15,000 (100% WRF).

5. Fund management of lottery hunts on Lāna‘i; document printing, data input, and drawings - \$15,000 (100% WRF).
6. Fund game mammal facilities development and operations and maintenance on Lāna‘i - \$50,000 (100% WRF).
7. Fund clerk position for Lāna‘i check station - \$25,000 (100% WRF).
8. Habitat remediation/enhancement - \$25,000 (100% WRF).
9. Purchase flatbed truck - \$75,000 (75% WRF).



Hawai'i Island Hunting Areas FY 2019



WEST HAWAI'I DISTRICT

Game Operations and Maintenance

Objectives: Conduct predator control activities and maintain game related facilities and infrastructure, including guzzlers and hunter access roads.

Accomplishments: The part-time General Laborer began trapping in May of 2018. There were three mongoose and one cat trapped at Pu'u Wa'awa'a Forest Reserve and seven mongoose and 13 cats trapped at Mauna Kea. Also, roads and firebreaks were maintained to improve hunter access to Pu'u Wa'awa'a Forest Reserve and Pu'u Anahulu Game Management Area.

Game Program Research

Objectives: Accurately estimate survival rates, population demographics, and habitat use in the Pu'u Wa'awa'a Forest Reserve and the Pu'u Anahulu Game Management Area.

Accomplishments: 15 GPS collars were purchased and fitted on sheep in Pu'u Wa'awa'a Forest Reserve and Pu'u Anahulu Game Management Area (total area is approximately 105,000 acres). This helped to increase the sample size of collared animals in a continuing research project that began in 2016. Data from this project showed that adult sheep in the study area had an apparent annual survival rate of 95%. The most common cause of mortality was predation by wild dogs. Camera traps were also used to estimate population sizes for sheep and goats. The population of sheep was estimated to be 748 (95% Confidence Interval [591, 906]).

Game Program Coordination

Objectives: Assist vendors in Kona with hunting license sales and training (these being the only outlets for the public to purchase hunting licenses in Kona other than the DOFAW office 40 miles away in Kamuela).

Accomplishments: The district's Secretary assisted with hunting license sales training of vendors in Kona. During anticipated increase in hunting license sales traffic at these establishments, the Secretary assisted with license sales and dissemination of information pertinent with upcoming seasons.

Temporary Hire of Half-Time General Laborer

Objectives: Assist the district wildlife staff in the operations and maintenance of projects and provide predator control at various locations.

Accomplishment: This position was filled in October 2018.

Motor Vehicle Repairs, Maintenance, and Equipment

Objective: Maintain trucks in service for WRF purposes.

Accomplishment: Vehicles remained functional with no debts to the WRF for maintenance.

Total WRF Expenditure for West Hawai'i District: Operating \$29,836.10.

Future Program Plans

1. Restore equipment purchase, vehicle purchase and maintenance, and facilities construction as funds accrue from the sale of hunting licenses, stamps, tags, and fees - \$35,000 (100% WRF).
2. Provide for the administrative costs, such as printing and publishing of game tags, permits, and announcements of hunting seasons and additions of new hunting areas - \$10,000 (100% WRF).
3. Once funding is available, improve game habitat projects in game management areas and other appropriate areas by installing water units and food plots and improving cover - \$50,000 (100% WRF).
4. Continue part-time General Laborer I position - \$33,000 (100% WRF).
5. Fund a full time Wildlife Biologist III position - \$55,000 (100% WRF).

EAST HAWAI'I DISTRICT

General Laborer Position

Objectives: Pursue duties pertaining to game/hunting program. Conduct predator control activities, facilities maintenance, and game species surveys.

Accomplishments: Work accomplished included habitat management, predator control, light construction for predator trapping and facilities maintenance, installation of hunter check and shooting area stations, and game species surveys, capture, and monitoring.

Commissions on Hunting License Sales

Objective: Maintain a network of hunting license vendors on the island of Hawai'i for sales of the 2018-2019 Hawai'i hunting licenses.

Accomplishment: Hunting licenses were sold at various vendor locations providing convenience to public hunters.

Game Operations and Maintenance

Objectives: Conduct predator control activities, maintain game-related facilities and hunter access roads, and support game bird rearing activities.

Accomplishments: All operations and maintenance activities were accomplished with little use of WRF monies. WRF monies were used to pay utility bills, support the administrative side of the game program and a new game bird rearing facility, and purchase game bird chicks. A combined total of 60 ring-necked and melanistic mutant pheasants and 55 chukar partridges were purchased and reared for release on cooperative game management area lease.

Total WRF Expenditure for East Hawai'i District: Operating \$6,382.94/Personnel \$56,904.39

Future Program Plans

1. Replace boundary and safety zone signs in hunting areas - \$1,500 (50% WRF).
2. Support game bird release facility and game bird rearing activities - \$1,500 (100% WRF).
3. Expand and improve game bird release program - \$3,000 (100% WRF).
4. Weed control and habitat improvements in public hunting areas - \$500 (50% WRF).
5. Check station, roads, trails, and water unit maintenance in public hunting areas - \$1,200 (50% WRF).

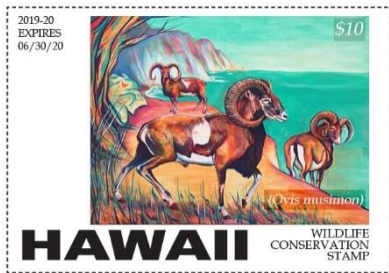
STATEWIDE ADMINISTRATIVE SEGMENT

Hunting License, Wildlife Conservation Stamp, and Game Bird Stamp Production, Program Sales, and Management

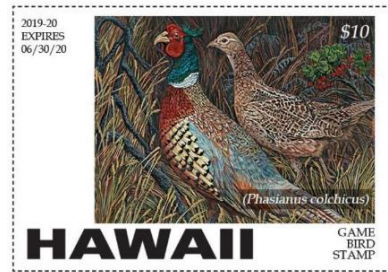
Objectives: 1) Produce and distribute required hunting licenses over the counter and online (electronic license), duplicate licenses, wildlife conservation stamps, game bird stamps, tags, and vendor booklets (a portion of the production costs were paid with WRF monies); and 2) Manage and monitor the WRF throughout the fiscal year to ensure all obligations are met.

Accomplishments: Produced and distributed vendor booklets, hunting licenses, conservation stamps, game bird stamps, tags, and duplicate hunting licenses. All hunting related materials for new hunting season were updated for public use.

Below are the 2019-2020 winners of the annual stamp art competition:



Art Contest Winner
2019-2020 Wildlife Conservation Stamp



Art Contest Winner
2019-2020 Game Bird Stamp

Notification of Hunting Season Openings and Changes

Objectives: Communicate any changes in hunting seasons and announce new or special hunting opportunities as required by state regulations.

Accomplishments: 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.

Implementation of Communication Strategies to Improve Hunter Recruitment and Retention

Objectives: 1) Write, publish, and distribute quarterly informational newsletter; and 2) Maintain a listserv (email list) for all hunting enthusiasts that would like to receive hunting related updates, announcements, and newsletter.

Accomplishments: The quarterly informational newsletter has been published since October 2017. The *Go Hunt Hawai'i* newsletter is an informational newsletter to connect hunters and DOFAW resource managers. This newsletter is available online on the DOFAW website.

A listserv was created for those who are interested in signing up to receive hunting related updates, announcements, and newsletter. There are now 6,107 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.



This is the tenth edition of *Go Hunt Hawaii*, a quarterly newsletter to connect hunters and the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DFAWA). Sign up to stay up to date on announcements, changes to hunting areas, research on animal populations and more.

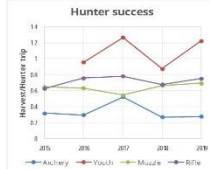
SIGN ME UP

2019 Lana'i Axis deer season

The 2019 Lana'i Axis deer season ran from Feb. 16, 2019 to May 12, 2019, and 1,359 hunters took part to harvest 1,359 total deer. These charts take a closer look at hunter success during the Axis deer season. Hunter success is calculated as the number of harvested deer divided by the number of hunter trips.

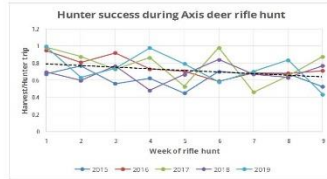
HUNTER SUCCESS

Here is a comparison of hunter success during the four hunts: archery, youth, muzzleloader, and general rifle. The archery hunt started the season, followed by the youth hunt. Youth hunters had great success as they got early in the season, and this could be a good opportunity for more youth to get involved in hunting. They have a good chance of harvesting a deer and there is plenty of room for additional youth hunters to join.



RIFLE HUNT SUCCESS

This chart shows the success of rifle hunters during the nine weekends of the general rifle hunt over the past five years. There is no statistically significant decrease in hunter success over the nine weekends, so those who take part in the Axis deer rifle hunt should have comparable success harvesting Axis deer no matter which weekend they participate.



Go Hunt Hawai'i Newsletter (June 2019)

Public Engagement in Game Management

Objective: Create a report on the annual hunting informational survey to assist in improving management in public hunting areas in the State of Hawai'i.

Accomplishment: The second report for the annual online hunter survey was completed, which included information about hunting statewide in 2017. Nearly 1,200 hunters filled out the survey, which was more than double the number of responses from the first survey. The report is available online (see dlnr.hawaii.gov/recreation/hunting/).

Some of the highlights from the survey are on the following page.

BY THE NUMBERS
Game harvested by hunters

	Axis Deer, Lana'i	Bearded Turkey, Hawaii
2016	1,429	2,070
2017	1,681	2,260
2018	1,431	2,283
2019	1,359	1,955

Announcements

HUNTING LICENSE SALES

DLNR WILL ISSUE NEW HUNTING LICENSES AND STAMPS FOR THE NEW HUNTING SEASON

Effective June 15, 2019, the DLNR/DFAWA offices have begun issuing hunting licenses and stamps for the new hunting season (July 1, 2019 through June 30, 2020). A valid hunting license is required for hunting on public and private lands.

Hunters may also purchase their hunting licenses and stamps by credit card via the State of Hawai'i website at <http://www.dlnr.hawaii.gov/recreation/>.

KAUAI

BLACK-TAILED DEER SEASON

Dates for the black-tailed deer hunting season on Kauai have been announced.

The application deadline for regular deer rifle tag season is **3:30 p.m. Friday, August 2, 2019**.

LANAI

MOUFLON SEASON STARTS

The mouflon sheep season starts on the last Sunday in July with archery hunts for 8 consecutive days, followed by a youth hunt weekend.

For season length, bag limits, and other information for all hunts, please see Title 13, Chapter 122, Rules, Regulations, Game, Mammal Hunting.

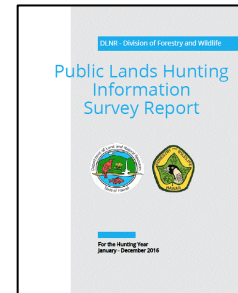
PUPU WA'AWA'A FOREST RESERVE

HUNTING SEASON EXTENDED

Feral goat, sheep, and pig hunt authorized for the Pupu Wa'awa'awa Forest Reserve. For more information on the bag limits, dates, and rules for this hunting season, please click here.

The **Makal Archery Hunt** will take place from July 20, 2019 through August 25, 2019.

The **Makal Muzzleloader Hunt** will take place from August 31, 2019 through September 29, 2019.





Most hunters supplement meals with game — 46% supplement for up to 9 meals a month, and 36% for 9 to 30 meals a month.



Top three most utilized hunting units — Unit 1, 2, and 3 on Lana'i. Mauna Kea GMA and Kaohe GMA on Hawai'i Island was the next most heavily used.



Most hunters had hunted on public lands — (84%), with 49% hunting game mammals, 30% gamebirds and mammals, and 5% gamebirds only.



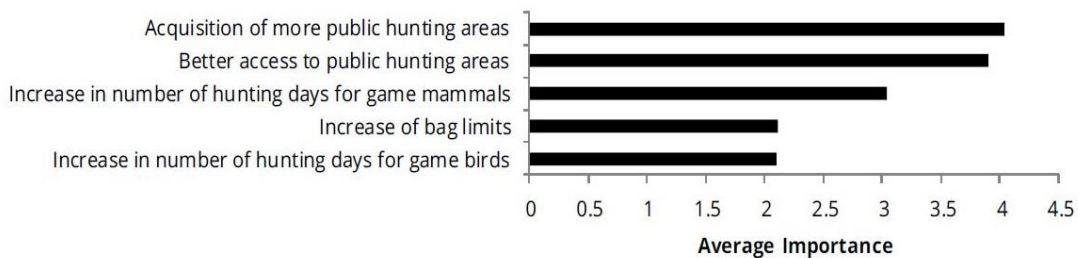
Top three reasons for hunting — To acquire wild game meat, to spend time in nature, and for recreation and sport.



More than half of hunters had hunted on private lands — (54%), with an average of 27 days per year.



Most valued potential improvements to the hunting program — (see graph below)



Hunting License Sales Coordination

Objective: Assist vendors, such as Walmart and Island Archer with hunting license sales, payments, and collection of funds.

Accomplishments: During anticipated increase in hunting license sales traffic at these establishments, the clerical staff assisted with license sales and dissemination of information pertinent with upcoming seasons.

Hunting Program Mobile Application

Objectives: Collect hunting activity data more efficiently and provide hunters with a more convenient process by allowing them to check in and out of public hunting areas and record animal harvest electronically.

Accomplishment: Entered into a contract with Trailhead Labs, Inc., for the creation, deployment, and maintenance of a hunting program mobile application.

Mile Marker 16 Shooting Range – Hawai'i Island

Objective: Assist with safety enhancements of the Mile Marker 16 range.

Accomplishments: Existing side berms and backstops were significantly reinforced with 1,280 cubic yards of cinder to contain bullets and reduce the possibility of escaped projectiles. Portions of the range, including the entrance road were partially leveled.

A portion of the public hunting area at Mile Marker 16 on the Saddle Road was formally designated as a public shooting range by the Board of Land and Natural Resources on February 23, 2018. It was established with the intent of providing 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 continue to assist with maintenance and oversight of the range.

Total WRF Expenditure for Administration: Operating \$80,380.02/ Personnel (\$416.23)/
Contracts \$94,999.00

Future Program Plans

1. Produce and distribute hunting licenses, stamps, and vendor booklets.
2. Utilize revenue from the sale of hunting tags, stamps, and fees to support the statewide game program.
3. Publish notification of game bird and game mammal hunting season announcements and *Go Hunt Hawai'i* newsletter.
4. Maintain existing leases, licenses, and other access agreements that provide hunter access to non-DOFAW controlled hunting lands.
5. Acquire fee title or access easements for lands that provide opportunities for public hunting, public recreation, and wildlife management.

WILDLIFE REVOLVING FUND EXPENDITURES

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

Oahu Administration	Expenditures & Claims	Maui	Expenditures & Claims
Operating	\$ 80,380.02	Operating	\$ 21,549.07
Personnel	\$ (416.23)	Personnel	\$ 6,999.45
Claims	\$ 6,167.81	Claims	
Contracts	\$ 94,999.00	Contracts	
Total	\$ 181,130.60	Total	\$ 28,548.52
Oahu		Molokai	
Operating	\$ 26,732.32	Operating	\$ 83.50
Personnel	\$ 12,931.68	Personnel	
Claims		Claims	
Contracts		Contracts	
Total	\$ 39,664.00	Total	\$ 83.50
West Hawaii		Lanai	
Operating	\$ 29,836.10	Operating	\$ 66,306.26
Personnel		Personnel	\$ 75,422.26
Claims	\$ 7,652.25	Claims	\$ 13,394.20
Contracts		Contracts	
Total	\$ 37,488.35	Total	\$ 155,122.72
East Hawaii		Kauai	
Operating	\$ 6,382.94	Operating	\$ 32,754.11
Personnel	\$ 56,904.39	Personnel	\$ 28,891.74
Claims		Claims	\$ 2,372.00
Contracts		Contracts	
Total	\$ 63,287.33	Total	\$ 64,017.85

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
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.