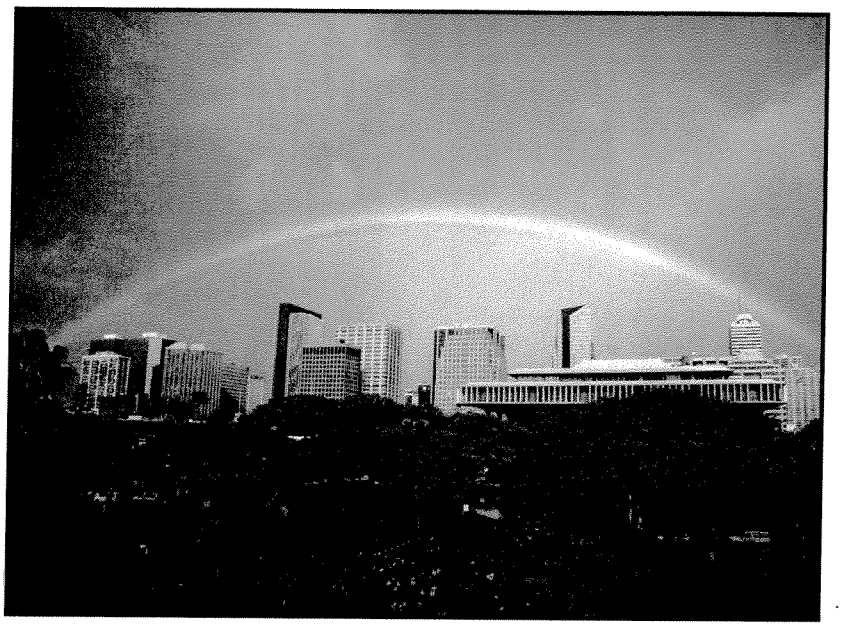
Annual Report

Grant No. 03-DG-11052012-106

Fiscal Year 2003-2004



Prepared for
USDA - Forest Service – Region 5
Fire & Aviation Management

By

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DLNR - Division of Forestry & Wildlife

I. State Fire Assistance Program (SFA)

A. **Goal.** To provide protection for forest, brush, natural areas, and grassland to the extend needed to hold fire damage below the level at which it would interfere with high-level, sustained yield of products and services from these lands.

B. **Objectives.**

1. Provide fire protection coverage on 3,360,000 acres throughout the State.

2. To reduce the threat and losses from wildfires in interface areas on private and state lands through public and interagency participation.

3. To provide protection for forest, brush, natural areas, and grassland to the extent needed to hold fire damage below the level at which it would interfere with high-level, sustained yield of products and services from these lands.

4. To minimize man-caused fires by improving agency prevention program(s) via training, technical assistance, and utilization of contemporary techniques for public education measures.

5. To improve the response and firefighting capability of agency(s) via training, equipment acquisition, and organizational structure and procedures.

6. To suppress wildfires in a safe manner and at a minimum cost consistent with land and resource management goals.

7. To integrate fire management as an element of natural resource management.

a. **Prevention**

Mission. To minimize man-caused fires by improving DOFAW's prevention program via training and adoption of contemporary techniques for public education measures.

i. Carry out the Cooperative Forest Fire Prevention Campaign, e.g. brochures, posters, signing, etc.

ii. Participate in fire prevention activities, e.g. Smokey Bear appearances at various parades, schools, farm fair venues, etc.

iii. Promote the Firewise Communities USA program and work with communities statewide on firewise issues.

Accomplishments

Fully attained.

1) DOFAW, along with Smokey Bear, presented Maui Electric Company Power Maintenance and Vegetation Control managers with a 'Fire Prevention Recognition' plaque with regards to the exceptional vegetative control work on power poles in Ukumehame.

2) Participated in the planning of the upcoming Prevention Workshop in February 2004.

3) Participated with Firewise in the Maui Association of Landscape Professionals Event at Kaahumanu Center in Celebration of Arbor Week.

4) Participated with Firewise in a meeting with the Kahikinui Hawaiian Homestead Association with 15 participants and the Kula Fire Engine Company present. Provided two highway prevention signs to the Association.

5) Participated with Firewise Training for the Kahikinui Hawaiian Homestead Association at Maui Community College with 8 participants as well as a County Fire Prevention Specialist present.

6) Firewise Community—a) Inspected lands owned by the Newtown Community Association in regards to compliance with Firewise Project. Validated removal of weedy species and landscaping work to reduce risk potential and fuel hazard reduction. Also engaged in discussions regarding more fire mitigation project(s) for possible grant assistance, b) With Denise Laitinen (Firewise Coordinator) and Lance LaPierre (Nature Conservancy), attended a meeting with Palehua-Palikea residents encouraging them to organize and implement Firewise community concepts for their remote and highly vulnerable neighborhood, c) Reviewed land use proposals for the Waiawa and Koa Ridge areas and made recommendations for "firesafing" several planned residential and industrial developments.

7) Created a ground inspection plan for the MECO power line corridor at Ukumehame.

8) Conducted a ground inspection of the MECO power line corridor at Ukumehame.

9) Maui Branch personnel along with Smokey Bear participated in the Fourth of July, Makawao Rodeo Parade on July 5, 2003. Approximately 5,000 spectators were present.

10) Continued to promote and handout Fire Prevention materials and brochures to the public.

11) Worked in cooperation with DLNR – State Parks Division to post two 'Smokey Bear – Wildfire Prevention' signs in Polipoli State Park to remind visiting public of the dry and fire prone conditions.

12) Posted 'Smokey Bear – Wildfire Prevention' sign at the Polipoli Road cattle guard entrance as a result of the continually dry conditions that the area had been experiencing. Approximately 3,000 vehicles enter the area every month.

13) Completed logistical and planning duties for Maui Branch personnel to participate in the Maui County Fair Parade.

14) Maui Branch personnel, along with Smokey Bear, participated in the Maui County Fair

Parade on Oct. 3, 2003. DOFAW included their Gamma Goat, M-41 and M-5 with a trailer depicting wild land firefighters in action. Approximately 12,000 to 15,000 spectators were present. .Smokey Bear appeared at the Maui & Kauai County Fairs respectively, having been visited by approximately 4,500 children and parents.

15) Participated in MFD's Fire Prevention Awareness Show on Oct. 8, 2003 at the Maui War Memorial Stadium. Displayed DOFAW's gamma goat suppression vehicle and demonstrated some of its capabilities. Approximately 500 grade school students attended the show.

b. **Presuppression**

Mission. To improve the response and firefighting capability of the DOFAW organization and to integrate fire management as an integral part of natural resource management programs.

i. Conduct basic firefighting and specialized training statewide, based on Branch needs; collaborate with other fire agencies in the development and use of joint training opportunities.

ii. Continue to improve and maintain the Remote Automatic Weather Stations on Kaua'i, O'ahu, Maui, and Hawai'i.

iii. Incorporate the Geographical Information System concept including the development and maintenance of fire maps, fire weather data, and other fire-related matters.

iv. Participate in the Council of Western State Fire Managers, California-Nevada-Hawai'i Forest Fire Council, and the Hawai'i Fire Chiefs Association meetings and other seminars that promote fire health and safety.

v. Conduct in-house statewide fire management core group meetings as needed to resolve protection issues, consolidate training, etc.

vi. Continue to manage and use all Federal Excess Personal Property (FEPP) equipment statewide in accordance with program regulations; conduct onsite review; complete an annual physical inventory of all equipment.

vii. Continue to integrate fire protection with other resource management programs, e.g. ecosystem management concepts.

viii. Cooperate with the State Civil Defense, State Fire Council, and USDA Forest Service to augment fire data gathering and simulation, resource tracking and assignments, supporting technologies, etc.

ix. Construct & maintain existing firebreak roads, trails, etc.

Accomplishments:

Fully attained.

1) Continued to input Kula State Forest data for FireFamily weather monitoring.

2) Met with newly appointed fire chiefs of Maui and Kauai County, respectively; informed them of agency and DOFAW fire management programs and protocols.

3) Compiled historical wild land fire statistics for County Civil Defense reports.

4) Provided comments regarding the Mutual Aid Agreement between DOFAW and Maui County Fire Department.

5) Inspected fire danger in the Kuaokala Game Management Area (Oahu) and Kula Forest (Maui) due to increasing KBDI numbers.

6) Continued to input fire reports into agency database files.

7) Continued to collect monthly rain gauge, temperature and traffic tally readings at the Kula State Forest Reserve.

8) Continued to conduct field exercises with DOFAW Branch personnel on water handling, fire vehicle and pump operations, and the use of foam eductors.

9) Participated in the Fire Management Assistance Grant Workshops held statewide. The workshops touched upon qualifications for FEMA reimbursement.

10) Reconned Molokai State Forest Reserve and Molokai Ranch properties for possible 'saddle tap' sites to increase availability of additional water sources needed for fire suppression activities. Collaborated with Harold Edwards (Molokai Ranch), Tony Ledesma and Randy Manaba (DOFAW) on plan and design of 'tap' security.

11) Cleared vegetation impeding on the Waiohuli firebreak access road (approximately half a mile).

12) Vegetation maintenance and control of black wattle along Polipoli Road (approximately 3 miles).

13) Updated Maui Branch fire suppression vendor list.

14) Conducted an informative meeting with Maui Branch Fire Logistics Staff in regard to agency's logistical procedures, protocols, equipment locations, etc. Meeting was intended to transition new logistics personnel.

15) Updated PPE's for DOFAW personnel. This included firepacks, new generation fire shelters, and fire boots.

16) Transferred 10 - 1" x 100' excess fire hoses and 24 excess fire flappers to MFD. (14 – Molokai, 10 – Kahului).

17) Provided MFD with adaptable hose fittings to allow for the use of the one-inch forestry hoses that have been recently transferred.

18) Created a fire burn plan for the Keanae Arboretum bamboo slash piles.

19) Conducted a 'training burn' at the Keanae Arboretum. Training burn was intended to instruct district personnel on proper uses of fire vehicles, fire equipment and supplies, hose lay setup, etc. under live fire conditions.

20) Continued on working in incorporating GPS/GIS technology into forestry and fire operations.

21) Continued to monitor RAWS data statewide.

22) Continued vegetation control in and around fenced RAWS locations.

23) Conducted and attended the annual DOFAW Fire Managers Core Group meeting on Kauai (Dec.10-11, 2003). Topics covered were upcoming fire training schedule, fire budgets FY'05, SFA, VFA, FEPP, fire reporting system, etc.

24) Posted two 'Keep Out - Burned Area' signs at the Lahaina Pali Trailhead parking lot area, as a result of a small brush fire that burned in the vicinity.

25) FEPP equipment were inventoried and updated statewide. This included the acquisition, transfer, and disposition of equipment.

26) Fire training records were updated for all DOFAW employees.

27) Attended meetings as part of the Maui and Big Island Wildfire Coordinating Groups.

28) The State Protection Forester attended the California/Nevada/Hawaii Forest Fire Council meeting in Reno, NV in October. He represented DOFAW and made a presentation at the conference, including an update on the Spring CNH meeting scheduled for April 14-16, 2004 on Kauai.

29) Worked with R5 staff on the training schedule for Spring 2004 for Hawaii.

30) Two DOFAW representatives attended the 25th Annual Conference of the Hawaii Fire Chiefs Association in Waikiki on Nov. 22-23, 2003. The attendance by DOFAW provided a balanced support of fire fighting leadership in Hawaii and gave impetus for changing the format and content of the annual confab.

31) The DOFAW Fire web site (www.state.hi.us/dlnr/dofaw/fmp) was maintained and periodically updated during this period.

32) Statewide fire caches were updated and maintained.

33) Continued to perform fuel hazard reduction activities in and around T&E plant enclosures on the island of Hawaii.

34) Maintained 39.5 miles of road and fire access trails in the Waianae and Koolau Mountains.

35) Maintained 21 miles of fuel break in the Puu Ka Pele Forest Reserve, Kauai.

36) Maintained 4.5 miles of firebreak in the Puu Anahulu Game Management Area, Hawaii.

37) Maintained all RAWS sites statewide.

38) Continued to maintain the strategically placed fuel break at Waianae Kai Forest Reserve. Also, strategically planned the planting of native plants for a shaded fuel break in appropriate places along the fire fighting structure; may also include provisions for irrigation using water from a natural spring in the area.

39) Dispatched two DOFAW representatives to the Second International Wildland Fire Ecology and Fire Management Congress & Fifth Symposium on Fire and Forest Meteorology at

Orlando, FL on November 16-20,2003. (Trip Report available for review upon request.)

40) DOFAW, with the assistance of HFD, US Army, and the USFWS, conducted the islands first non-federal prescribed burns in Puu Anahulu in January and February. Total area burned was 45 acres.

41) Maintained 32 miles of firebreaks in Puu Waawaa through chemical control, mowing and grazing.

42) Maintained 70 miles of firebreaks in Puu Anahulu.

43) Sprayed 5 acres of fountain grass in Puu Anahulu and 2 acres of fountain grass in Kipuka Oweowe (Puu Waawaa area).

44) Completed the installation of a level and stable platform to accommodate a 10,000 gallon collapsible tank for air operations at the Honolulu Board of Water Supply Reservoir in Waianae-Kai Forest Reserve.

45) A series of basic and specialized training was done statewide over the course of the year. This included the Annual Refresher, Fire Prevention Workshop, S-130/190 Basic Wildland Firefighter, S234/Dozer Operations, Model 42 Engine training,, A/B Chainsaw classes. Approximately 200 personnel from various state and federal agencies took part in the training sessions.

46) Conducted and attended meetings as part of the Maui and Big Island Wildfire Coordinating Groups.

47) The State Protection Forester attended the annual Western State Fire Managers (WSFM) meeting in San Diego, CA in March 2004. At this meeting, the State Protection Forester was elected to serve on the NWCG Wildland Urban Interface Working Team. Fire issues affecting the West and the Pacific territories were addressed at this meeting. Issue papers were written and presented to the Council of Western State Foresters in May 2004 at the Western Forestry Leadership Coalition meeting in Tucson, AZ.

48) DOFAW staff reviewed over 100 environmental assessments, EISs, conservation district use applications and film permits. Comments and recommendations were made to these reviews to ensure that fire issues were identified and resolved before approval is given.

49) DOFAW participated in the annual Makani Pahili (Hurricane) exercise, which is conducted by the State Civil Defense Agency. Various local, county, state, and federal agencies were involved in this important exercise. This exercise is a measuring stick on where the state stands in disaster preparedness.

50) Fire training records were updated for all employees.

51) The State Protection Forester attended the first Chiefs, Managers, and Superviors (CMS) Working Group meeting in Portland, OR in September 2003. Issues of national significance were discussed and presented to the NASF Fire Committee. The State Protection serves as the Chair to the CMS Working Group.

52) Reviewed national and state emergency mobilization protocols by attending several workshops hosted by FEMA and SCD. Particulary looked at Emergency Support Function #4 Firefighting and had discussions with federal counterparts to ensure a "seamless" approach for preparation, response, recovery, and mitigation.

53) With considerations for mitigating the effects of escaped fires from the Makua training area, Oahu Branch provided fire protection comments for the Kaluakauila Management Unit. The U.S. Army developed a fire management strategy for the biologically sensitive area and was seeking additional perspectives from other agencies.

54) Dispatched DOFAW personnel to the CNH Meeting on Kauai during the period April 14-16, 2004. The meeting was well attended by federal, state, and local officials. Presentations had practical applications for prevention, presuppression and suppression activities. Of particular interest was the application of ICS to manage large wildfire incidents that had international implications, i.e. Scott Vail-Australia; and its flexibility to meet unique situations, e.g. Don Studebaker-Recovery of space shuttle components and control spread of Newcastle Disease.

55) All four county fire departments were the recipients of the Volunteer Fire Assistance grant this year. See Section III – VFA.

c. **Suppression**

Mission. To suppress wildfires in a safe manner and at a minimum cost consistent with land and resource management objectives and fire management direction.

1) Continue to gather statewide fire data and add to the existing database for data analysis and reporting fire history for each Branch.

2) Respond to each wildfire incident in a timely manner with appropriate forces as mandated by the provisions of the Land Fire Protection Law (Chapter 185, Hawai'i Revised Statutes).

3) Assist the U.S. Forest Service, as needed, on wildland fires and other non-fire emergencies in California, the western Pacific territories, and other western states.

Accomplishments:

Items 1-3: Fully attained.

1) During this reporting period, DOFAW was involved in suppressing 7 fires consuming 1,886 acres. This included 1 on Hawaii (30 acs.), 1 on Maui (60 acs.), 2 on Oahu (1,790 acs.) and 3 on Kauai (6 acs.)

2) The fire database was updated during this grant-reporting period.

3) The State Protection Forester was dispatched to the Fish Creek Complex Fire in Montana in August, serving as a Type II Safety Officer on the incident.

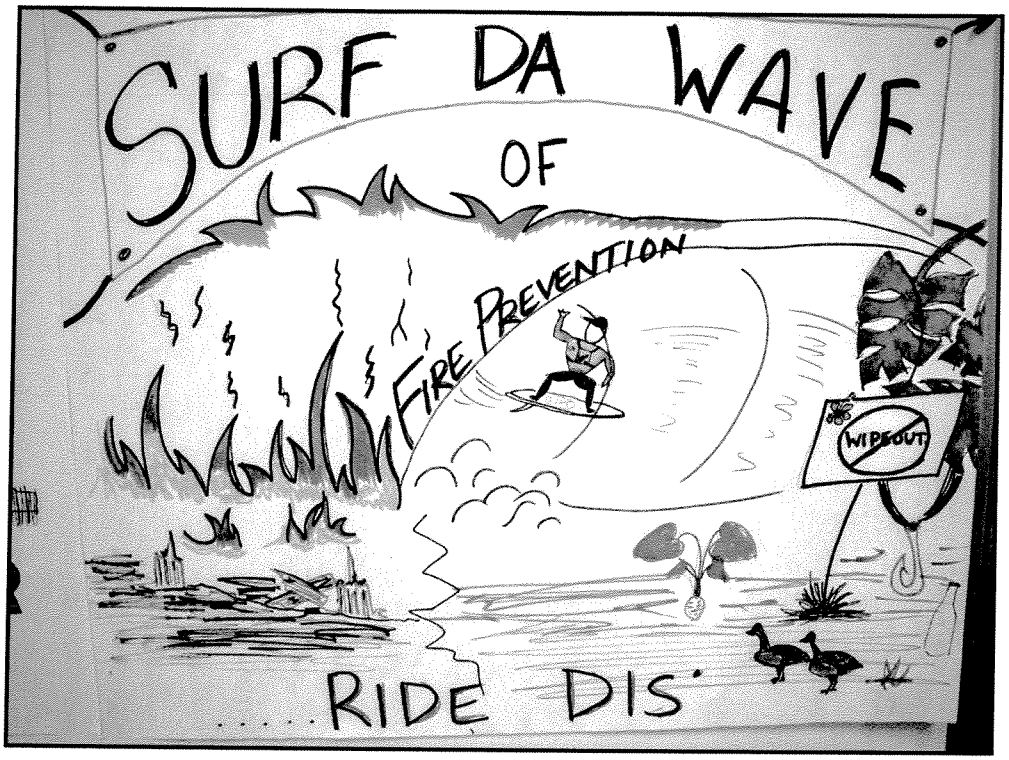
4) During FY03, 21 fires were reported statewide totaling 4,002 acres. Six fires were reported on Kaua'i, (9 acs.), 11 on O'ahu (1,809 acs.), 1 on Maui (60 acs.), and 3 on Hawai'i (2,124 acs).

II. Volunteer Fire Assistance (VFA)

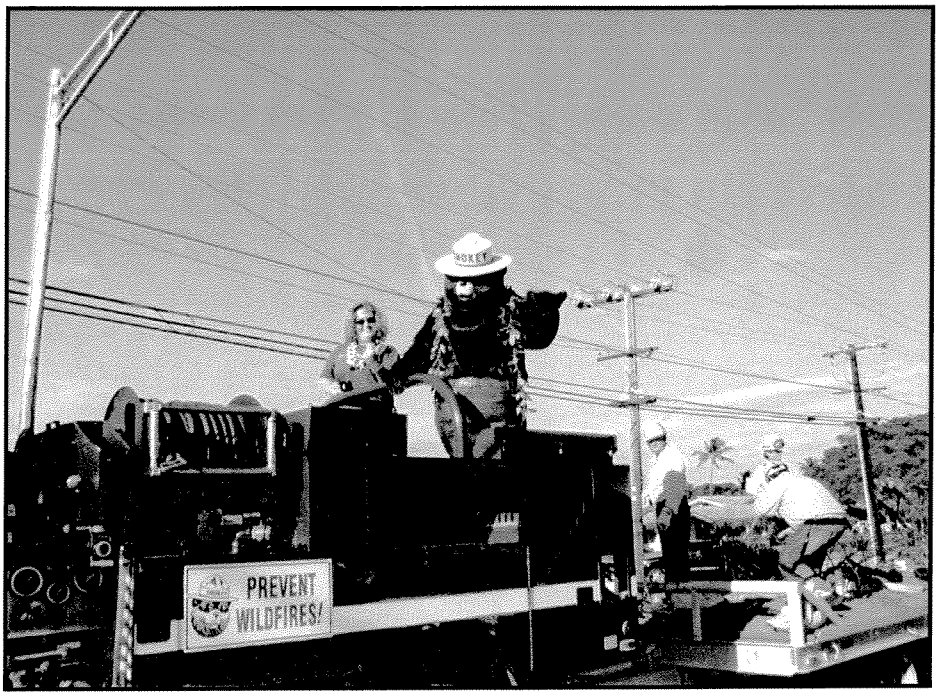
A. **Goal.** To organize, train, and equip the statewide County Fire Departments firefighting force to efficiently and effectively prevent, control, and suppress fires in remote areas.

B. **Activities.**

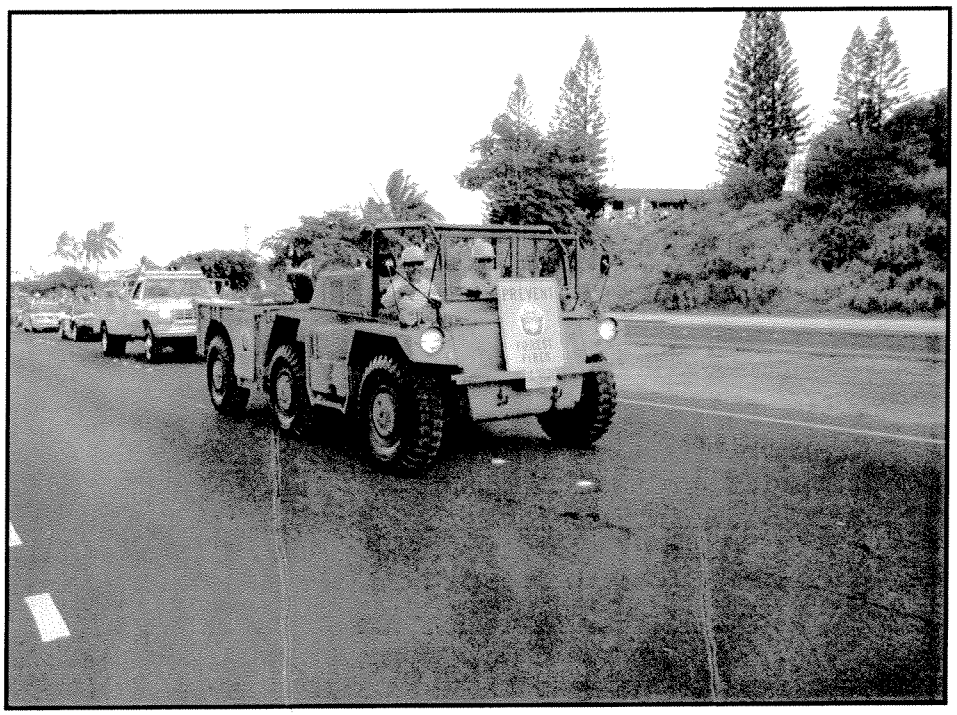
The four county fire departments purchased personal protective gear as well as hoses and fittings.



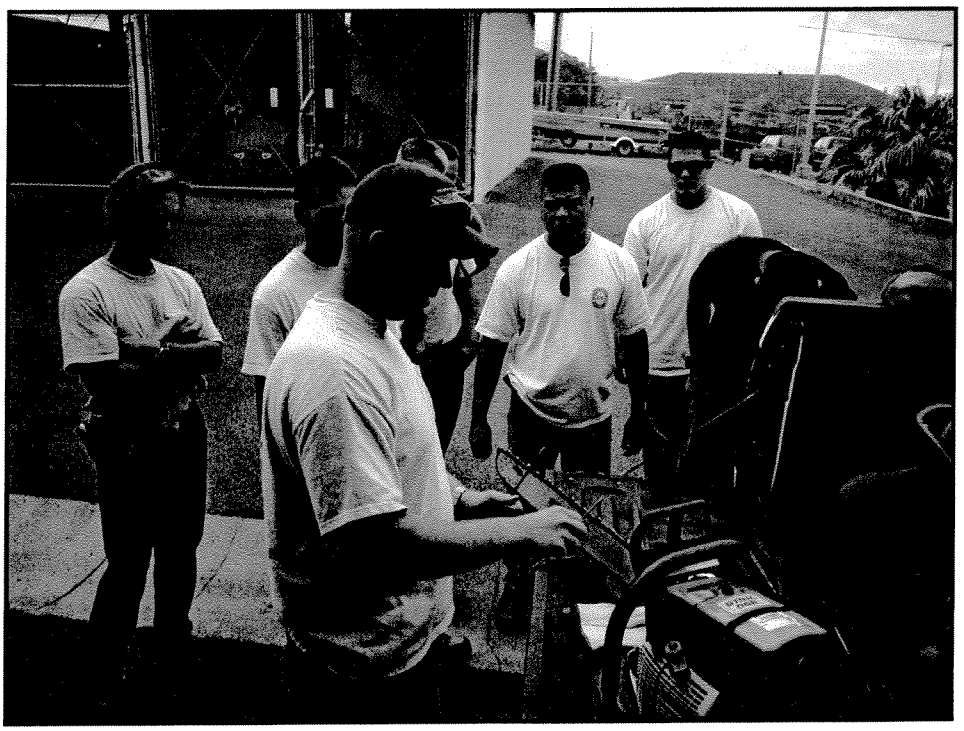
(Above): One of four posters designed by students in the Wildfire Prevention Workshop (Feb., 2004). (Below): The Wildfire Prevention class included members from the four County Fire Departments as well as the Federal Fire Dept., the U.S. Army, and DOFAW.



(Above): Smokey Bear makes an appearance at the Maui County Fair parade. (Below): Lance & Creighton join the parade on the Gamma. (Oct. 2003).

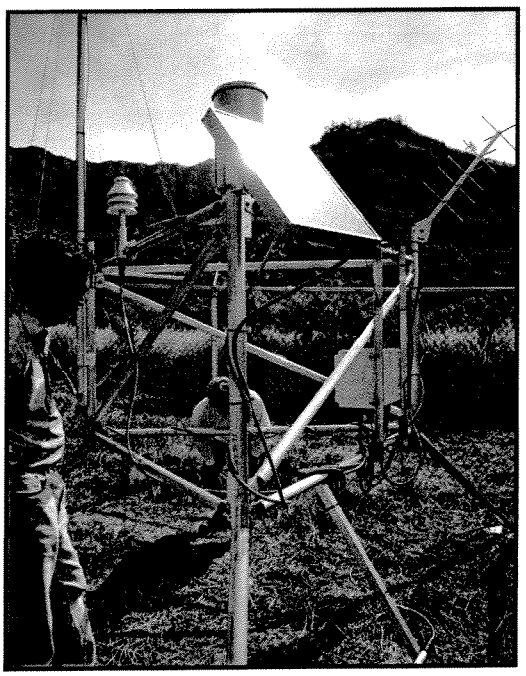


The S212 Wildfire Powersaw workshop continues to provide students with basic mechanics, saw handling, and felling procedures required to do a job safely (April 2004). Above: Maui Fire Dept. Capt. Jeff Shaffer applies what he learned in class. Below: Instructor Mike Eaton goes over chainsaw maintenance procedures with several students.

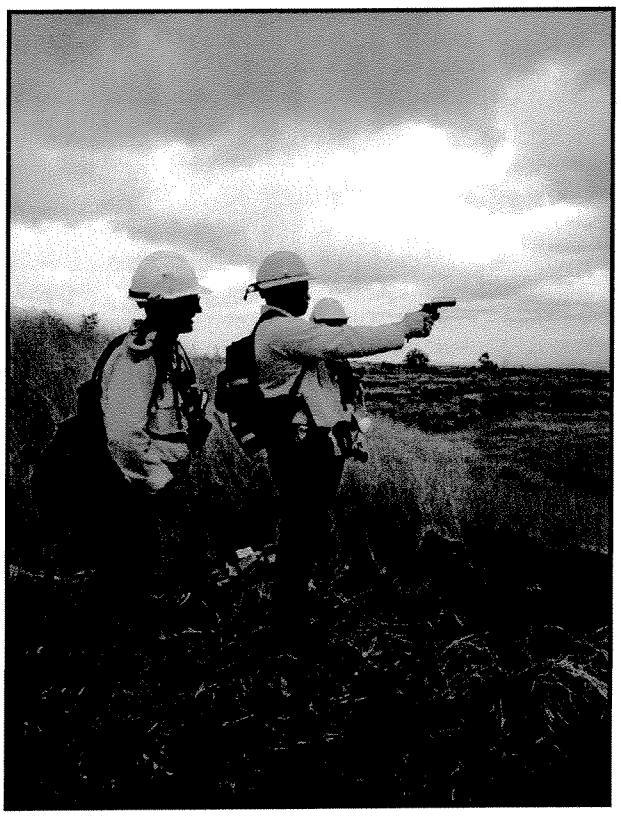


(Above): Gayland Enriques, USARHAW Wildfire Program Manager, assists DOFAW in repairing the RAWS station at Puu Anahulu (Jan. 2004). Regular scheduled maintenance on the RAWS station means accurate up-to-date weather data needed for fire managers to make critical decisions on tactics and strategies on fire operations.

(Below): Foresters inspect a RAWS in the Waianae Kai Forest Reserve.

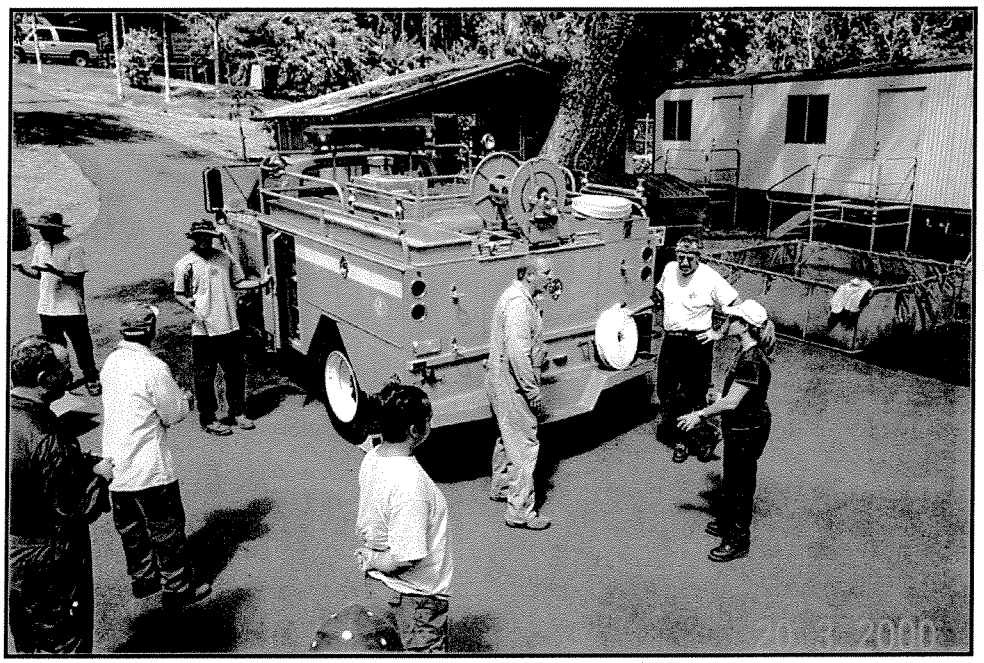


(Above): Battalion Chief John Truett relays instructions to students during the Dozer Operations/Firing Techniques workshop. (Below): Ray Caoagdan prepares to fire a flare from a Very pistol. Instructor Tom Lane looks on. (Mar. 2004)



The Volunteer Fire Assistance Program provides a valuable asset to the County fire department's budget. (Above): State Protection Forester Wayne Ching delivers a $50,000 check to Kauai Fire Chief Dennis Furushima. Kauai Branch Manager Alvin Kyono looks on. (Below): A $50,000 check is delivered to Honolulu Fire Chief Attilio Leonardi. Oahu Branch Manager Patrick Costales & Assistant Chief Wayne Tomita join in on the presentation.

Two S-130/190 courses were taught on Kauai (above) and Maui (below), respectively, to county fire department personnel. DOFAW continues to provide technical and financial support to firefighting agencies statewide. (Jan./Jun. 2004)



(Above): Instructor Bob Bell (in coveralls) works with the Oahu Branch DOFAW on water handling techniques using the Model 42. Four Model 42's were acquired in March 2004 through the FEPP Program. Mr. Bob Bell and Mr. Clay Stanley spent 10 days working with DOFAW employees, holding workshops on Hawaii, Maui, Oahu, and Kauai.