

Ka`ūpūlehu Dryland Forest
2008 Second Quarterly Report
By Site Manager, Wilds Pihanui Brawner

The spring months have brought much growth to the forest, as native seedlings and weeds emerge everywhere. With this, the fuel load for fire has been escalated, therefore efforts to reduce weeds and expand the firebreak are constantly underway.

A site consultation with DLNR, DOFAW, and Hawaii County fire officials proved beneficial and productive as I was able to get a better grasp of fire culture and its interaction in a dry forest. Access roads and the fenceline/fuelbreak are being sprayed to increase their widths to serve as larger and more effective firebreaks. Fallen trees that were leaning against others have been removed near the highway to reduce “ladder fuels” that can crawl up trees and takeover a forest.

Weed removal by hand and weed whacker continues along the fenced perimeter and efforts to create new partition roads are currently underway. Those partitions are intended to break up long, continuous stands of fountain grass to better protect the forest by splitting up dense stands into sections.

Further progress with the fire mitigation plan is underway for both Ka`ūpūlehu Makai and Mauka, in coordination with local fire fighters, the west Hawaii wildfire management group, and neighboring landowners. Additionally, some funds are being pursued through federal and state fire mitigation grants available for appropriate sites/projects.

Our restoration efforts have included plenty of weeding and seeding activities, as well as one outplanting in June. A total of 100 plants were put into ground (25 of which were endangered) with the help of the Hawaii Youth Conservation Corps (HYCC) and ‘Imi Pono. Plans for new outplanting around the hale area are set and the project will take place very soon.

Invasive species removal has consisted of primarily hand weeding by myself, our HYCC intern Rebecca Carvalho and student groups. Herbicide application continues in areas of newly outplanted zones as well as in areas soon to be planted later in the year. Cut stump-poison applications continue for all woody weed species that must be removed.

National Tropical Botanical Garden's (NTBG) mauka parcel remains in moderate standing in terms of weed pressure, as the same management efforts are taking place at that site.

Ungulate pressure is high around the perimeter, as management includes maintaining the fence line in good working order at all times. Small sections of the fence have required repair due to damage from encroaching goats. Large boulders and fallen logs near the fence are currently removed to minimize areas of easy entry into the forest. Perimeter checks and monitoring are persistent as the goats are relentless. The Ka`üpülehu Mauka enclosure has little need for fence maintenance as the newly installed 6-7" tall fence has proven very effective in both keeping animals out and killing them if they become stuck in the fence.

I developed an annual workplan for the forest, to cover high priority items and projects for the advancement of the preserve. My five-year strategic management plan is underway along with a fire mitigation plan, with much support from past management plans, local officials, and HFIA and NTBG personnel.

Tools and equipment are in good working condition, maintained by myself and professionals of the trade. General site maintenance has consisted of checking the whole fence line perimeter on a weekly basis, walking trails to assess areas that need attention for weeding or spraying or scouting new area for outplanting. All irrigation systems are in good working order. The water catchment tank was filled in April, which should last several months dependent on weather conditions and the plants' need for supplemental water.