



### MICONIA

Crewmembers conducted \_\_\_\_\_ acres of aerial and \_\_\_\_\_ acres of ground surveys for miconia for a total of \_\_\_\_\_ acres surveyed in \_\_\_\_\_ watersheds.

Watershed	Aerial Acres Surveyed	Ground Acres Surveyed	Mature Controlled	Immature Controlled	Work Hours
Halawa	139.30	0.00	0	0	25.00
Heeia	0.00	88.79	0	0	104.00
Kaalaea	99.18	14.82	4	65	35.50
Kahaluu	100.07	0.00	0	0	15.00
Kalihi	0.00	63.55	0	3	270
Makiki	0.00	30.98	0	1	133.50
Manoa	0.00	162.05	0	8	295.5
Nuuanu	0.00	105.08	0	0	158
Waimanalo	0.00	79.92	0	0	99
Waimea	0.00	32.63	0	0	16.00
<b>TOTAL</b>	<b>338.55</b>	<b>577.82</b>	<b>4</b>	<b>77</b>	<b>1161.5</b>

### BAY CEDAR

OISC conducted surveys for *Suriana maritima* in Kailua to confirm plant location. Three plants were found but not controlled. OISC has suspended management on this species for the time being.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Kawainui	4	0	0	0	3

### CANE TI

OISC conducted surveys and treatments for *Tibouchina herbecea* in Poamoho in partnership with the Koolau Mountains Watershed Partnership and the DLNR DOFAW Natural Areas Reserves field staff.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Poamoho	15.69	11	104	115	108

### CAPE IVY

Surveys and treatment of *Delairea odorata* were conducted over 57 acres in Kaloi watershed and a new population was detected and treated in Manoa. Surveys to delimit this population will begin in 2015.

Watershed	Acres Treated	Mature	Work Hours
Kaloi	0	Yes	20
Makiki		No	
<b>TOTAL</b>			

### DEVIL WEED

OISC staff continued management of *Chromoleana odorata* the Kahuku region of Oahu. Crews are conducting delimiting surveys in Kahana Valley.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Kahana	6.49	9	286	295	119
Paumalu	375.18	113	961	1074	776



<b>TOTAL</b>	<b>381.67</b>	<b>122</b>	<b>1247</b>	<b>1369</b>	<b>895</b>
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**FIREWEED**

Survey and treatment for *Senecio madascariensis* was conducted in the Keamanea watershed.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Keamanea	39.57	2	2	4	130

**FOUNTAIN GRASS**

Survey for and treatment of *Pennisetum setaceum* were conducted over 464 acres.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Kaupuni	53.37	0	8	8	40.00
Makaha	38.07	0	0	0	24.00
Keeau	8	0	28	28	56
Mailiili	107.17	0	0	0	16
<b>TOTAL</b>					

**HIMALAYAN BLACKBERRY**

Survey and treatment for *Rubis discolor* was conducted in Palolo over 63 acres.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Palolo	3.58	0	8	8	96

**PAMPAS GRASS**

Survey and treatment for *Cortaderia selloana* was conducted in four (4) watersheds.

Watershed	Aerial Acres Surveyed	Ground Acres Surveyed	Mature Plants	Immature Plants	Total Plants	Work Hours
Halawa	108	0	0	0	0	17.50
Heeia						
Kahaluu	100	0	0	0	0	15.00
Waikele						
<b>Total</b>						

**SMOKE BUSH**

OISC staff responded to a report of *Buddleja madagascariensis* in Waimanalo. The plant turned out to be another melastome commonly found throughout Oahu.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Waimanalo	0.001	0	0	0	1

**SPIKED PEPPER**

Surveys and treatments for *Piper aduncum* were conducted in two (2) watersheds.

Watershed	Acres Surveyed	Mature	Immature	Total Plants	Work Hours
Waimea	57.87	0	0	0	56.00

**PEST RESPONSE**



### COCONUT RHINOCEROS BEETLE (*ORYCTES RHINOCEROS*)

OISC is working in partnership with the U.S. and Hawaii Department of Agriculture to survey for a new pest species on Oahu, the coconut rhinoceros beetle. This pest beetle is only known to occur on Oahu in the State of Hawaii. It is a pest of a variety of palm and pandanus tree species. OISC conducted 177 surveys for coconut rhinoceros beetle (CRB) across thirty-one (31) watersheds across the island. OISC staff detected an adult CRB in Kalihi within the original two (2) mile buffer area.

	<b>Watersheds</b>	<b>Acres Surveyed</b>	<b># of surveys</b>	<b># of CRB detected</b>	<b>Work Hours</b>
1	Heeia	7.994	4	0	7.5
2	Kaelepulu	21.428	3	0	8
3	Kahawai	11.084	2	0	4
4	Kaneohe	10.291	3	0	8
5	Kawa	3.167	1	0	2
6	Kawainui	21.376	3	0	8
7	Keaahala	4.751	3	0	6
8	Puu Hawaiioloa	1.583	1	0	2
9	Waimanalo	1.584	2	0	4
10	Halawa	0.008	1	0	1
11	Halehaa	62.032	1	0	1.16
12	Heeia	9.5	4	0	5
13	Kaaawa	112.421	1	0	1.44
14	Kaelepulu	21.428	2	0	3
15	Kahana	221.293	1	0	4.1
16	Kahawai	11.084	2	0	2
17	Kaneohe	17.416	4	0	8
18	Kawa	6.334	2	0	3
19	Kawainui	33.251	5	0	9.5
20	Keaahala	7.918	4	0	5
21	Kualoa	77.948	1	0	2.08
22	Makaua	139.962	1	0	2.6
23	Papaakoko	42.232	1	0	0.78
24	Punaluu	206.468	1	0	3.84
25	Puu Hawaiioloa	3.166	2	0	3
26	Waimanalo	1.584	2	0	2
27					
28					
29					
30					
31					
	<b>Total</b>				



### Coqui Frog (*Eleutherodactylus coqui*) Early Detection Surveys

In coordination and collaboration with the Hawaii Department of Agriculture, OISC conducted twenty-four (24) surveys for coqui frog in five (5) watersheds across the island. Fourteen coqui frogs were captured across the island.

Watersheds	Acres Surveyed	# of surveys	# of frogs detected	# of frogs captured	Work Hours
Kahawai	2.154	3	0	0	0.8
Manoa	1.89	1	0	0	16
Waimanalo	1.947	2	7	6	12
Manoa					
Waimanalo	10.279	4	4	4	17.2
<b>Total</b>					

### Little Fire Ant (*Wasmannia auropunctata*) Surveys

In coordination and collaboration with the Hawaii Department of Agriculture and the Hawaii Ant Lab, OISC conducted seventy-eight (78) surveys for little fire ant in twenty-three (23) watersheds across the island. Little fire ant were detected in Kahawai, Waikele and Waimanalo watersheds.

LFA	Watersheds	Acres Surveyed	# of surveys	LFA detected (y/n)	Work Hours
1	Ahuimanu	2.472	1	N	16
2	Kawainui	0.132	1	N	1.5
3	Palolo	1.511	1	N	12
4	Waimanalo	17.589	6	N	85
5	Ala Wai	0.145	2	N	12
6	Halawa	1.695	1	N	10
7	Heeia	2.147	1	N	16
8	Kahawai	1.081	1	N	12
9	Kaneohe	0.356	1	N	8
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					



22					
23					
<b>Total</b>					

### **Naio Thrips (*Klambothrips myopori*) Early Detection Surveys**

Sixteen (16) early detection surveys were conducted for naio thrips in eight (8) watersheds across the island. No thrips were detected.

<b>Watersheds</b>	<b>Acres Surveyed</b>	<b># of surveys</b>	<b>Thrips detected (y/n)</b>	<b>Work Hours</b>
Ala Wai	1.14	6	N	8.4
Kalo	12.457	1	N	1.4
Koko Crater	11.631	1	N	4
Manoa	0.19	1	N	1.4
Nuuanu	0.359	1	N	1.4
Palolo	0.19	1	N	1.4
Waialaenui	0.549	2	N	3.4
Waimalu	.179	1	N	.5
<b>Total</b>	<b>26.695</b>	<b>16</b>		<b>34.5</b>

### **OUTREACH**

#### **MONTHLY VOLUNTEER TRIP**

The volunteer trip to Lyon Arboretum surveyed and controlled eight (8) *Ardisia virens* and 134 *Stromanthe tonckat* over 13 acres.

#### **OISC Volunteer Trip Control Results**

<b>Plant Species</b>	<b>Acres Surveyed</b>	<b>Mature Plants</b>	<b>Immature Plants</b>	<b>Total Plants</b>	<b>Volunteer Hours</b>	<b>OISC Hours</b>
<i>Ardisia virens</i>	13.84	0	8	8	72.20	41
<i>Stromanthe tonckat</i>		17	117	134		