



WARD RESEARCH

Baseline Awareness of and Attitudes toward Invasive Species in Hawaii

A Telephone Survey of Statewide Residents

**Prepared for:
The Coordinating Group on Alien Pest Species (CGAPS)**

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Objectives & Methodology

Objectives

The overall objective of the survey was:

TO PROVIDE A BASELINE MEASURE OF AWARENESS OF AND ATTITUDES TOWARD INVASIVE SPECIES AGAINST WHICH FUTURE PROGRESS CAN BE MEASURED.

Specifically, the survey sought to answer these questions:

- ✓ *What are the current levels of awareness of the invasive species issue?*
- ✓ *Where do residents get information about invasive or alien species?*
- ✓ *What is the level of concern about invasive species, both plants and animals?*
- ✓ *How likely would residents be to purchase plants labeled “non-invasive”?*
- ✓ *How likely are residents to report alien species sightings? and*
- ✓ *To what extent would residents support a statewide program to combat invasive species?*

Methodology

- Ward Research interviewed n=501 Hawaii residents on August 6-14, 2004 as part of a statewide omnibus telephone survey.
- The maximum sampling error for n=501 is $\pm 4.4\%$ at the 95% confidence level.

<i>Island</i>	<i># Interviews</i>	<i>% Total</i>	<i>Max. sampling error</i>
Oahu	n=364	73%	+/- 5.1%
Neighbor Island Total	n=136	27	+/-8.3%
Big Isle	n= 61	12	
Maui County	n= 52	10	
Kauai	n= 23	5	
<i>State Total</i>	<i>n=501</i>	<i>100%</i>	<i>+/- 4.4%</i>

- Statewide data was weighted by age to obtain proportions reflective of age groups in the statewide population.
- All households were selected using random-digit dialing, and surveys were completed using CATI (computer-assisted telephone interviewing).

Methodology

- **All respondents were screened to ensure that they were at least 18 years of age. Quotas were also established for island, ethnicity and gender based on census data to ensure a representative sample.**
- **Final results were weighted by age to ensure sufficient representation of young adults 18-34 in the data.**
- **Upon completion of the surveys, Ward Research edited, coded, data entered and tabulated the results.**
- **Survey questions were developed by the Coordinating Group on Alien Pest Species (CGAPS).**
- **The Detailed Tables following the Summary provide cross-tabulation data from key demographic subsamples (i.e., island of residence, ethnic origin, household income, age, etc.).**

Profile of Respondents

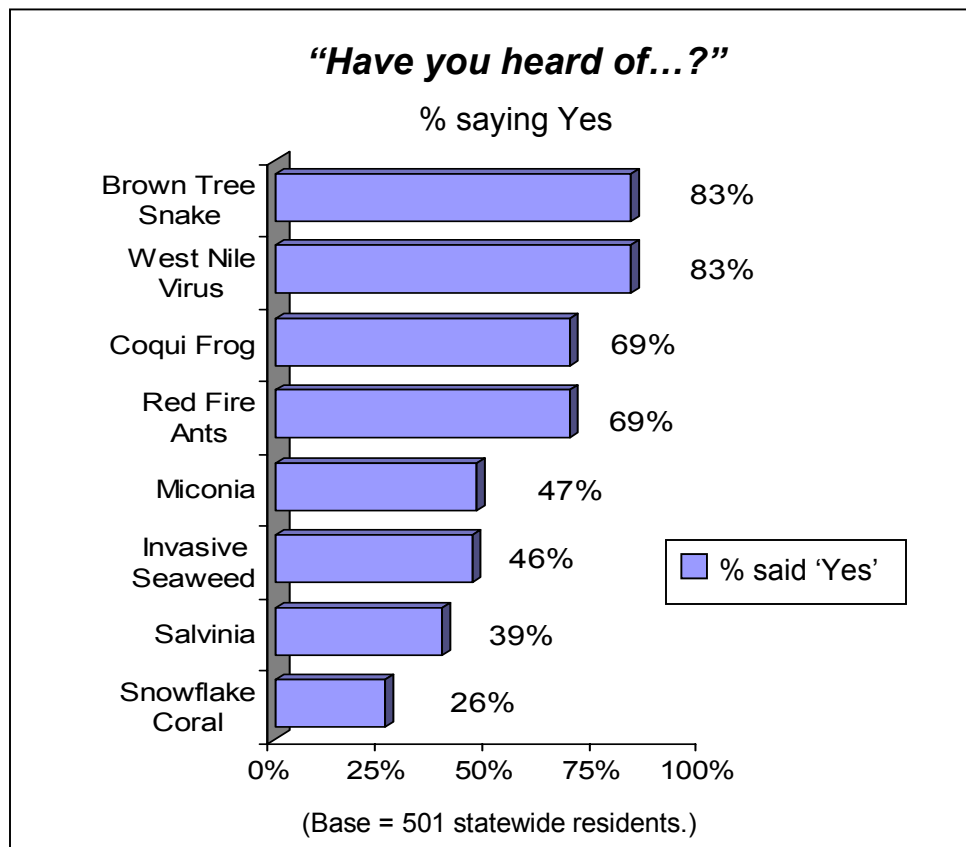
YEARS OF RESIDENCY	(%)	INCOME	(%)
Less than 5 years	17%	Under \$25,000	18%
5 to 10 years	6%	\$25,000 to \$35,000	13%
10+ years	30%	\$35,000 to \$50,000	28%
Born & Raised	47%	\$50,000 to \$75,000	17%
		\$75,000+	25%
AGE		ETHNICITY	
18 to 24	13%	Hwn./Part Hwn.	20%
25 to 34	19%	Caucasian	33%
35 to 44	21%	Japanese	19%
45 to 54	23%	Filipino	14%
55 to 64	12%	Chinese	4%
65+	14%	Mixed	5%
Mean	44.3 yrs.	Other	7%
GENDER		BASE:	501
Male	51%		
Female	49%		

Survey Findings:

A Telephone Survey of Statewide Residents

Awareness of Invasive Species

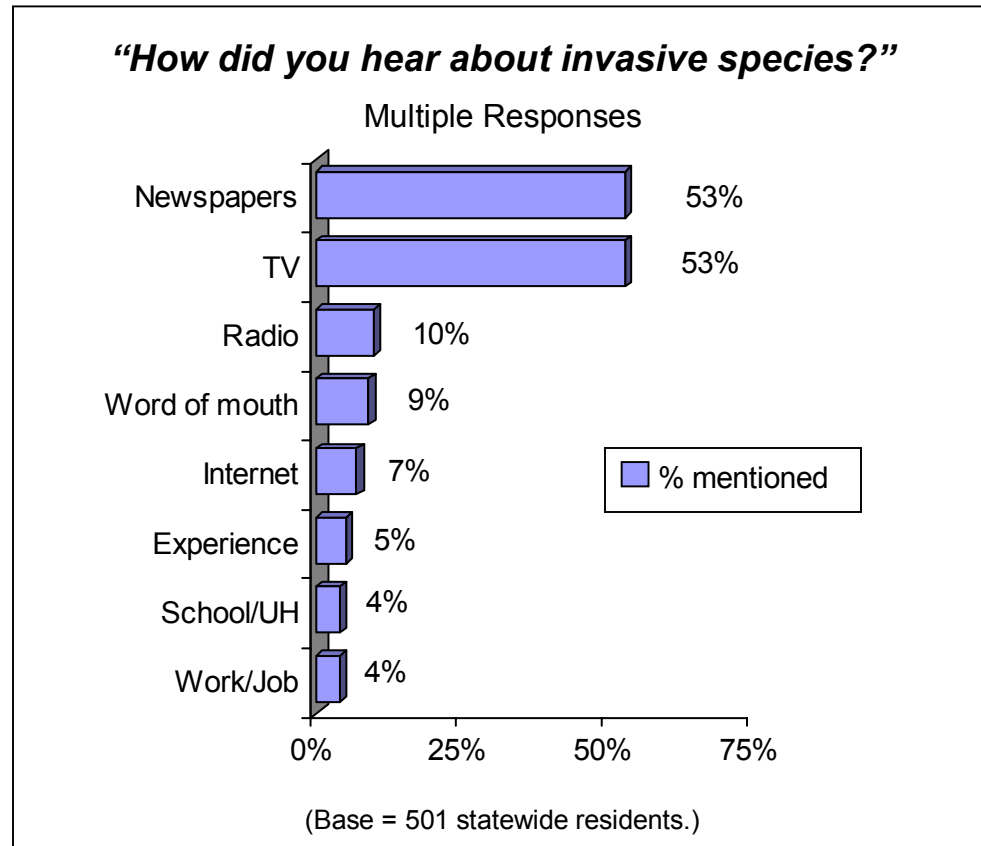
Awareness of the *brown tree snake* and the *West Nile Virus* is very high, based on survey data. Over 80% of statewide residents had heard of each of these alien species, and almost 70% had heard of the *Coqui Frog* and *Red Imported Fire Ants*.



On the other hand, well under half reported hearing of *salvinia* (39%) or the *snowflake coral* (26%).

Information Source: Invasive Species

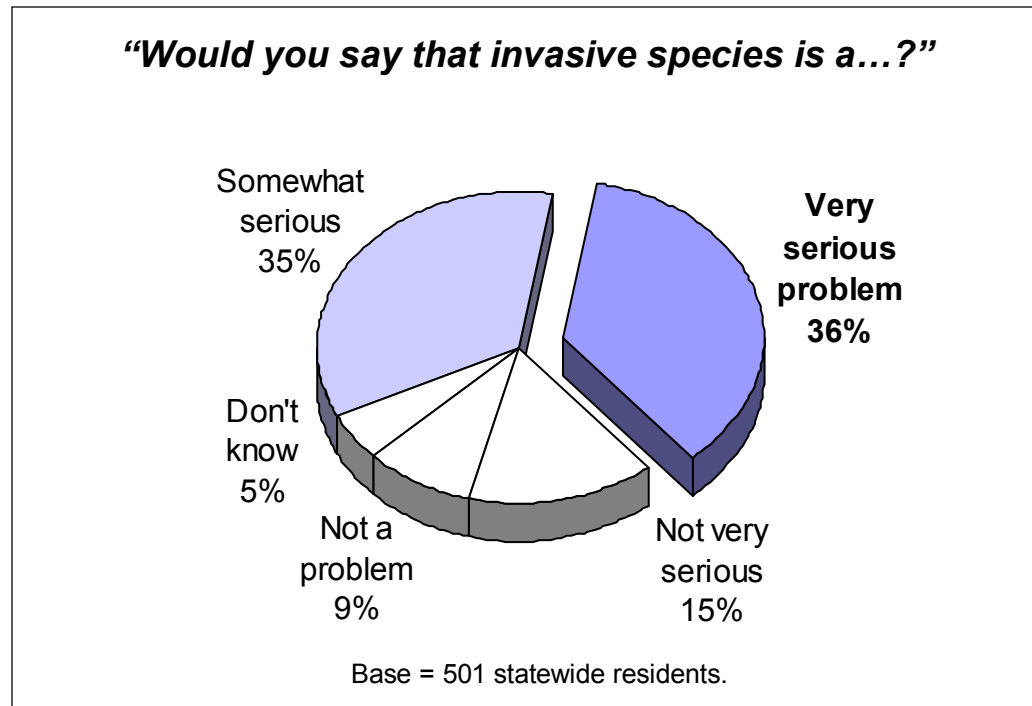
Mass media --- daily newspapers and TV --- is the information source about invasive species, based on “How do you hear about or get information about invasive species?”



On a combined basis, three in four residents (77%) named either newspapers or TV as their source of news about invasive species.

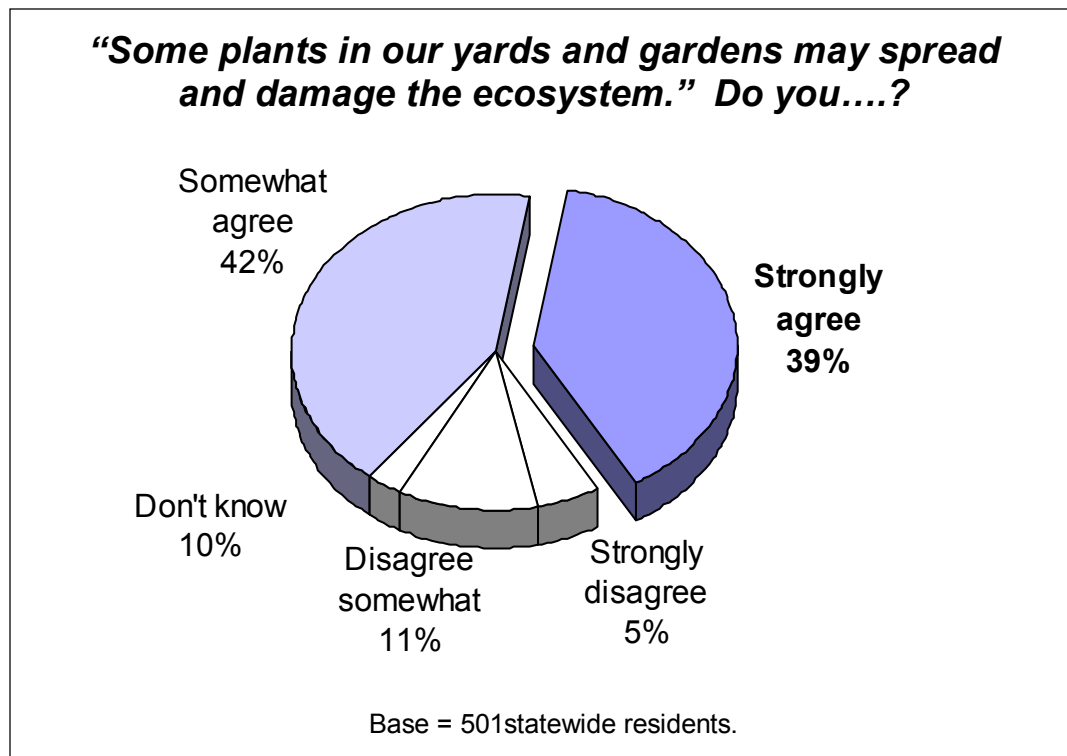
Attitude Toward Invasive Species

Most residents lack a sense of urgency about invasive species, according to survey data. About one-third (36%) feels it to be a “very serious problem.” The majority deems the issue either as “somewhat serious” (35%) or not a serious problem (24% combined).



Awareness of Invasive Plants

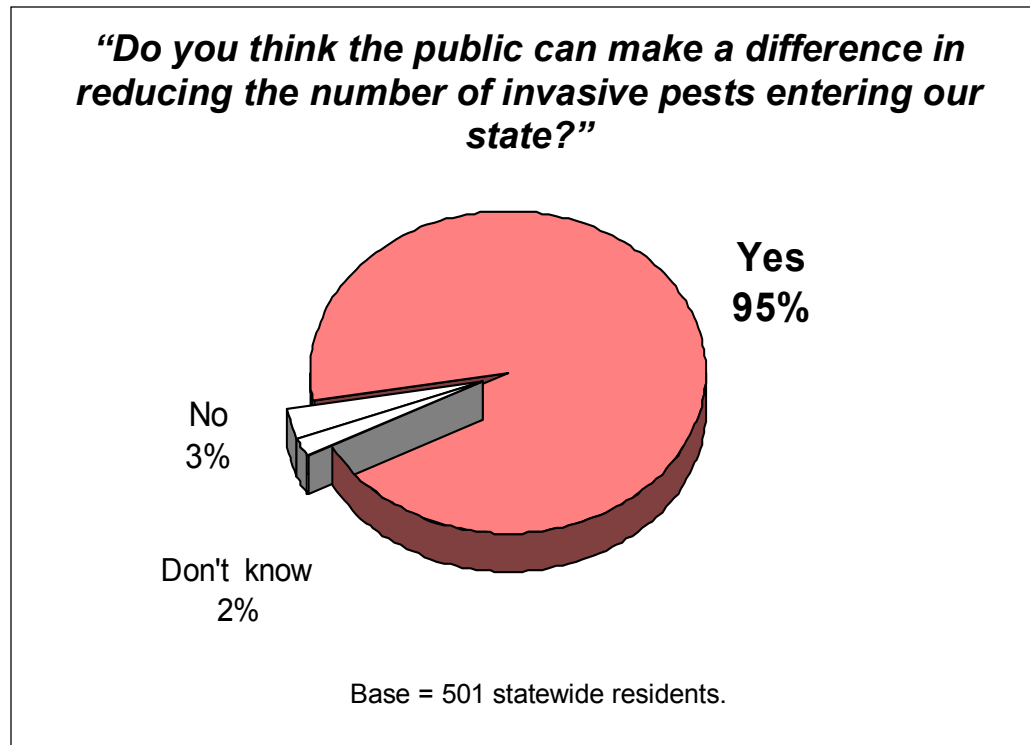
Public awareness of the impact of invasive plants is not high currently. About two in five residents (39%) strongly agreed that “*some plants we plant in our yards and gardens may spread into the native forest and damage the ecosystem.*”



Over half do not feel strongly about the issue, saying either that they “agree somewhat” (42%) or “disagree somewhat” (11%).

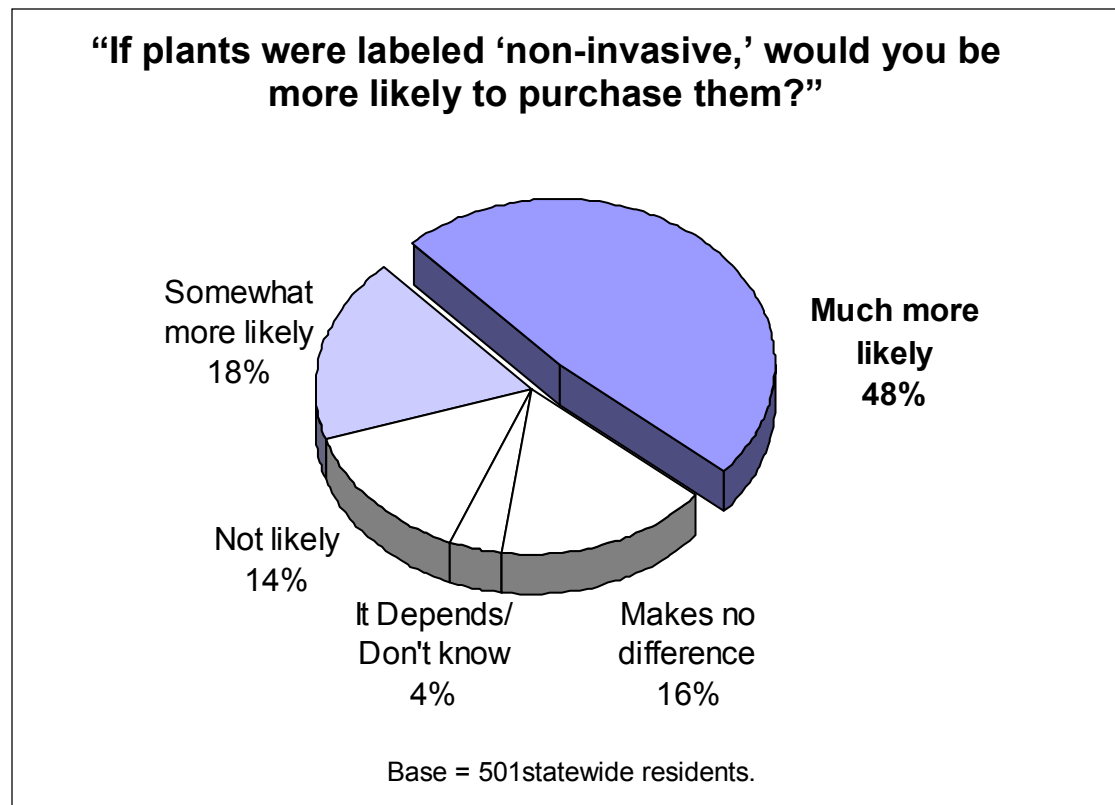
Reducing Invasive Pests in Hawaii

But nearly all residents agreed (95%) that the public at large can play a role in reducing the influx of invasive pests into the state.



Using a “Non-Invasive” Plant Label

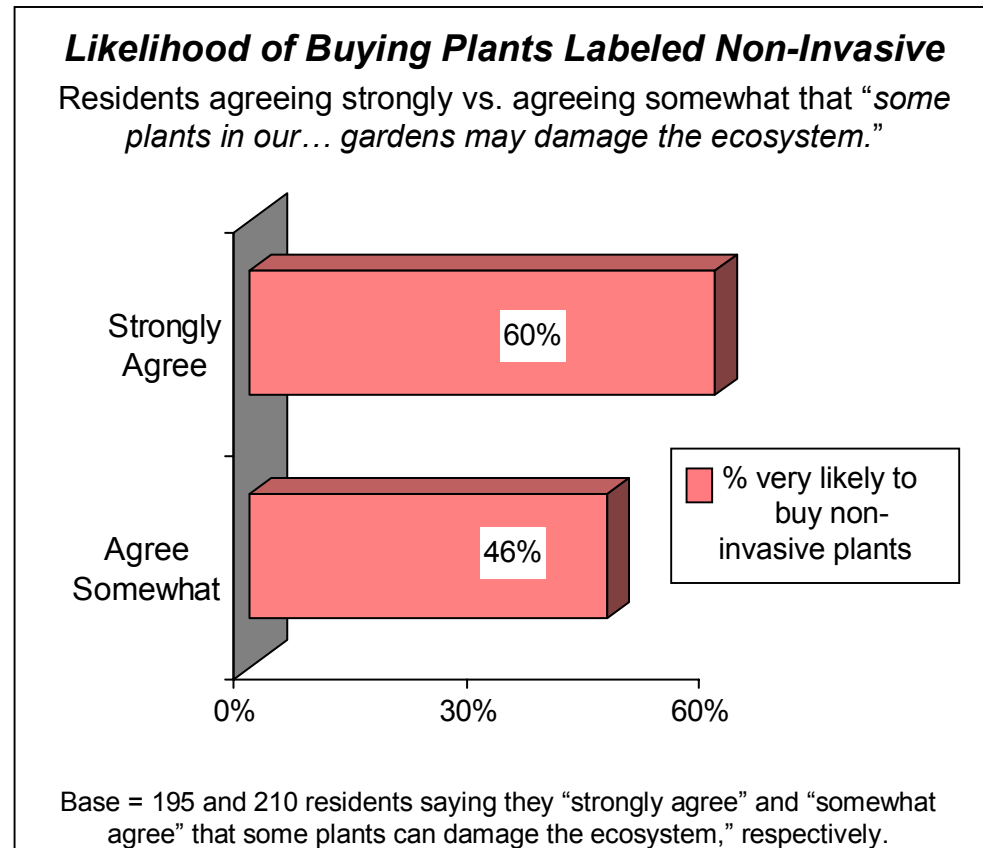
Labeling plants “*non-invasive*” or “*environmentally safe*” would encourage many residents to purchase them. In the survey, half (48%) said they were “much more likely” to buy plants with these labels at the garden store.



Awareness and Likelihood of Purchasing “Non-Invasive” Plants

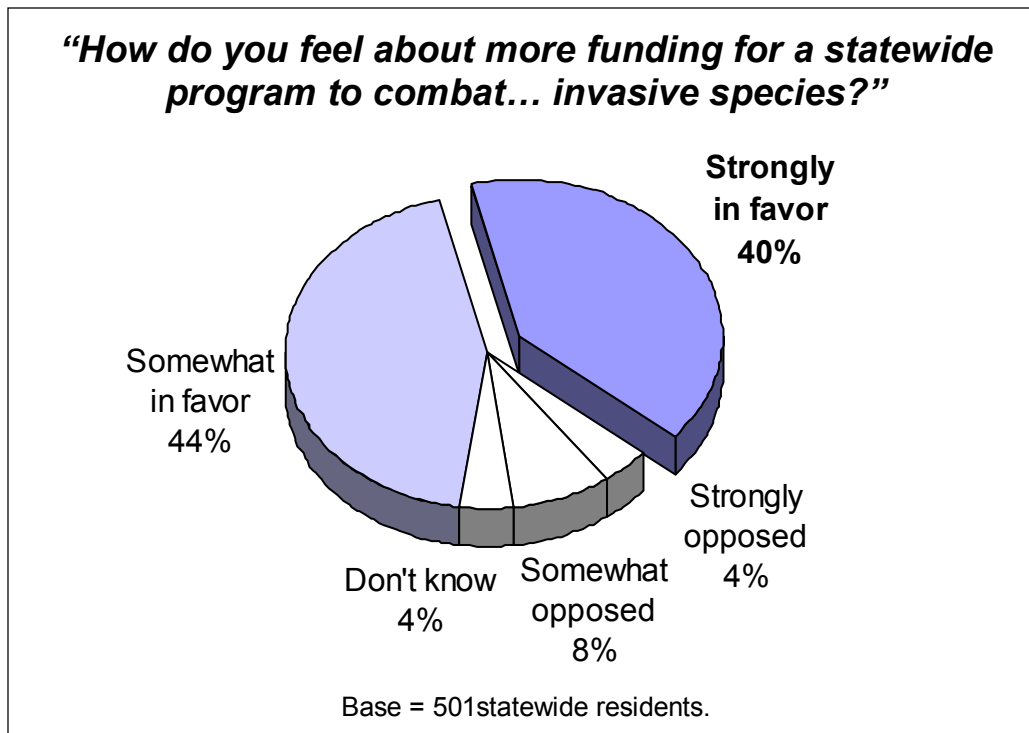
The data suggests that raising awareness of invasive plants may increase the likelihood of residents’ purchasing plants labeled “non-invasive” at the garden store.

Those who agree strongly that “*some plants... may spread into the forests and damage the ecosystem*” are reportedly more likely (60%), overall, to purchase non-invasive plants than are those who agree only somewhat (46%) with this statement, based on crosstabulation data.



Support for Invasive Species Funding

Public support exists for increased funding to combat invasive species. In response to "How do you feel about more funding for a statewide comprehensive program to combat and prevent invasive species?", 40% of residents said they were strongly in favor of such a program.

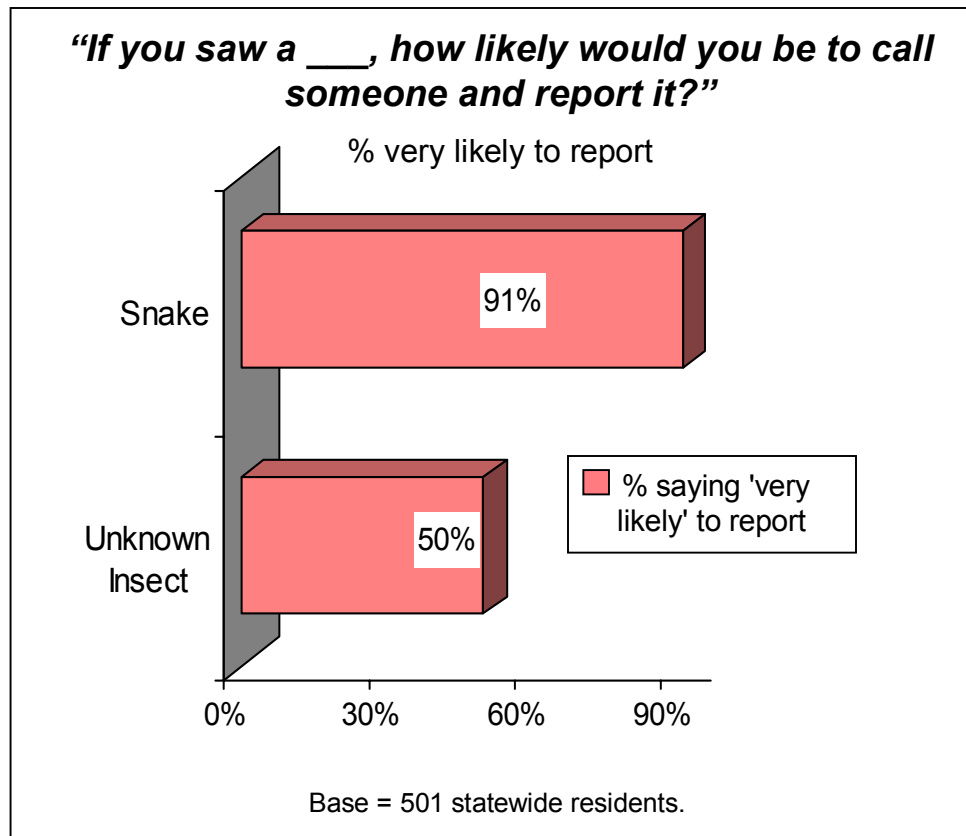


Another 44% are potentially supportive, saying they are "somewhat in favor" of more funding.

Relatively few (12%) oppose such a measure, currently.

Likelihood of Reporting Alien Species

Snakes are much more likely to be reported than alien insects, based on the survey. Nine in ten residents (91%) said they were “very likely” to report a *snake* if they saw one.



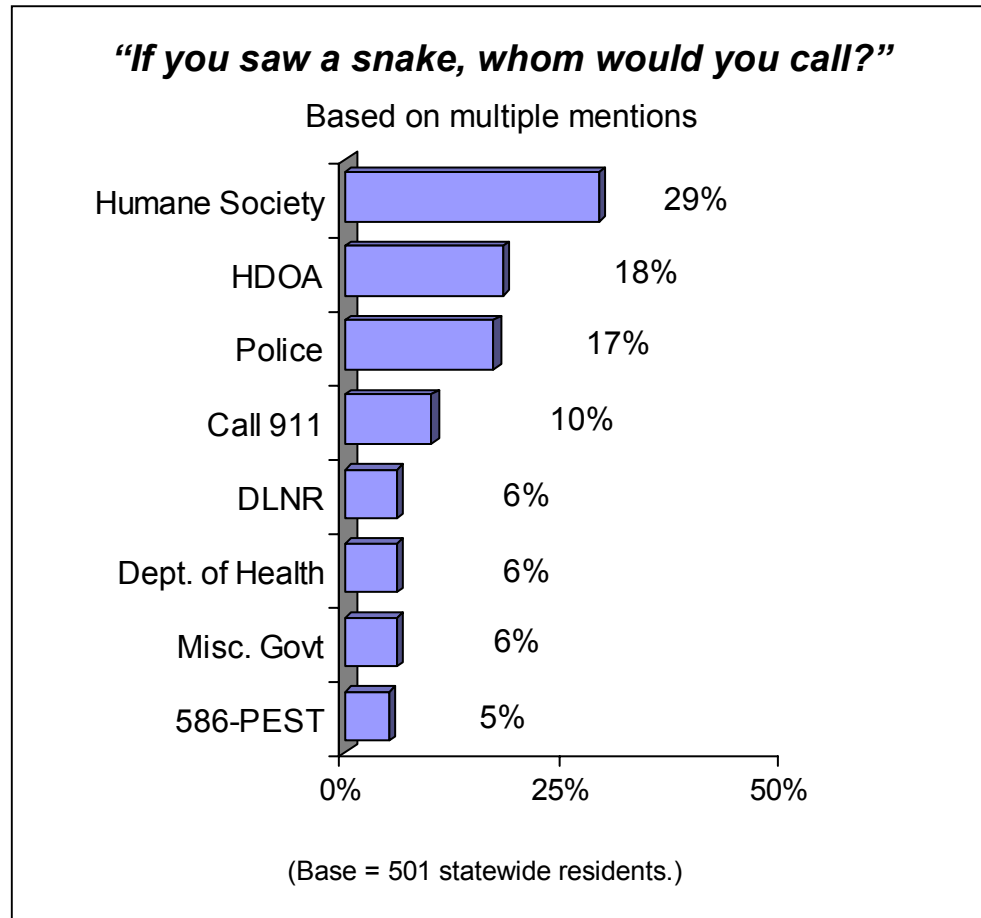
By comparison, half (50%) would be “very likely” to report an *unknown insect*.

Reporting a Snake

However, the public is not well-informed about how to report alien pests, based on responses to “*who would you call to report a snake?*”

The top responses to this question were: the *Humane Society* or *Animal Quarantine* (29%), state *Department of Agriculture* (18%) and the *police* (17%).

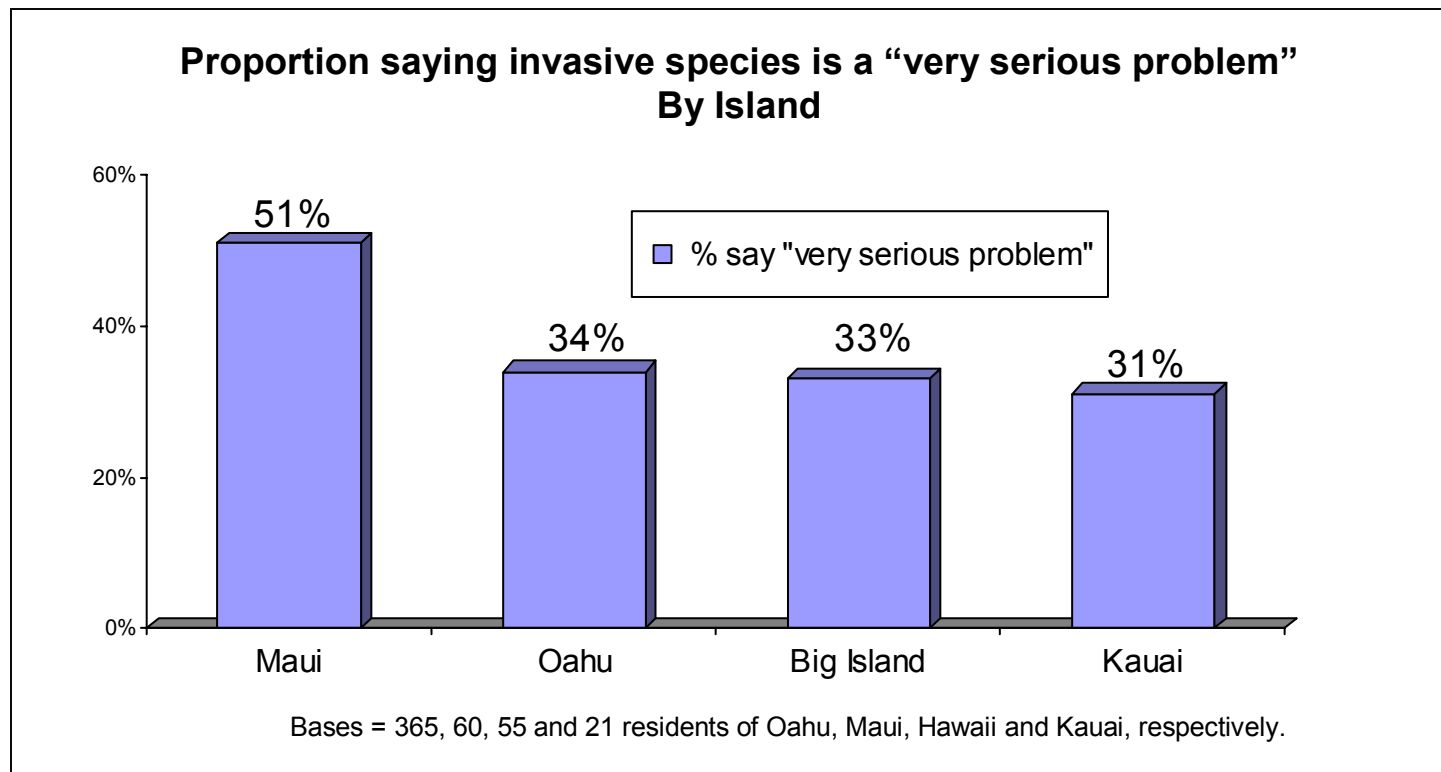
Only 5% of residents mentioned calling the *pest hotline* (586-PEST).



Analysis of Demographic Subsamples

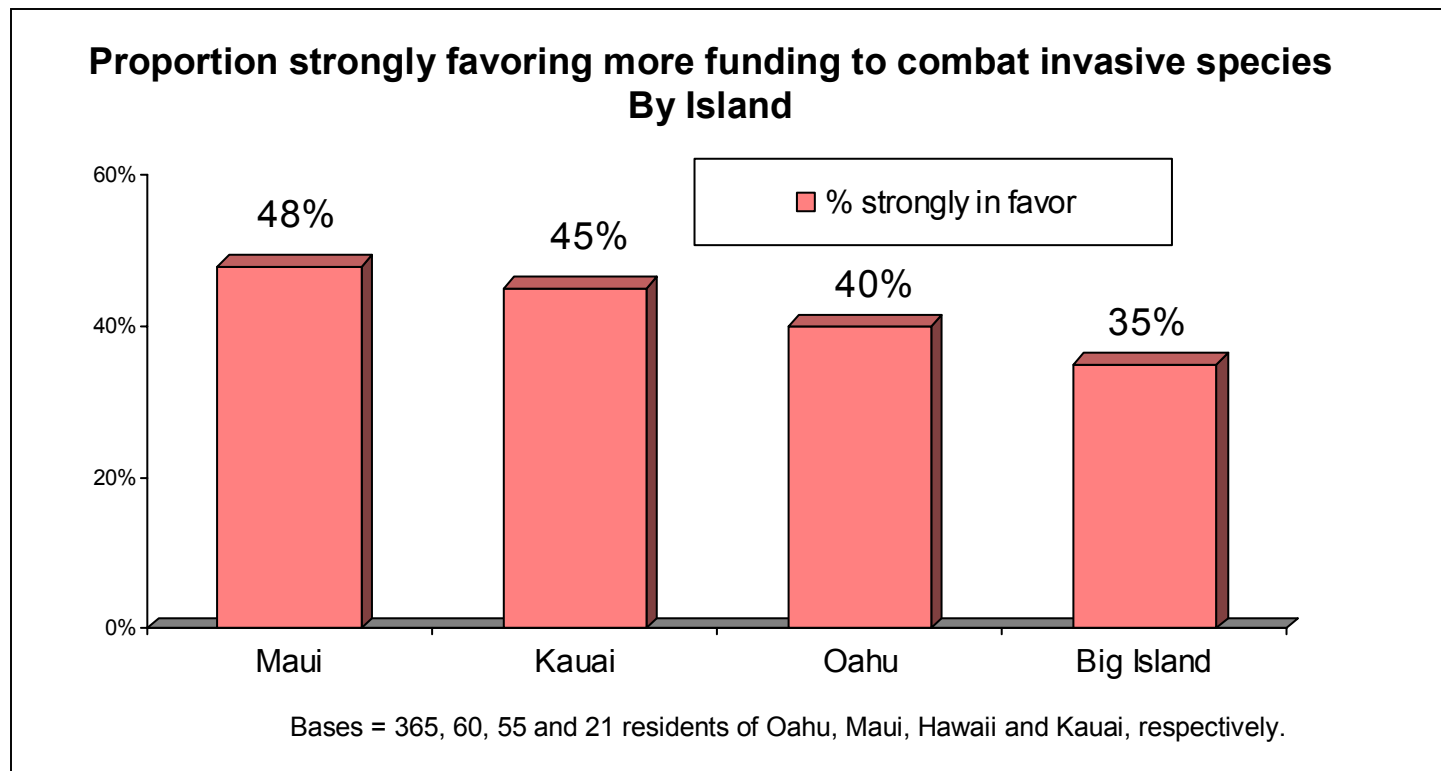
Concern over Invasive Species: By Island

Maui residents display more urgency than do other residents toward the invasive species issue, based on survey data. Half of Maui residents feel that invasive species are a “very serious problem,” compared to about one-third each on Oahu, the Big Island and Kauai.



Supporting More Funding: By Island

Relative to support for more funding to combat invasive species, differences by island were not found to be statistically significant at the 95% level of confidence. The data suggests that close to 40% of residents across the state strongly support increasing funding for a statewide program.

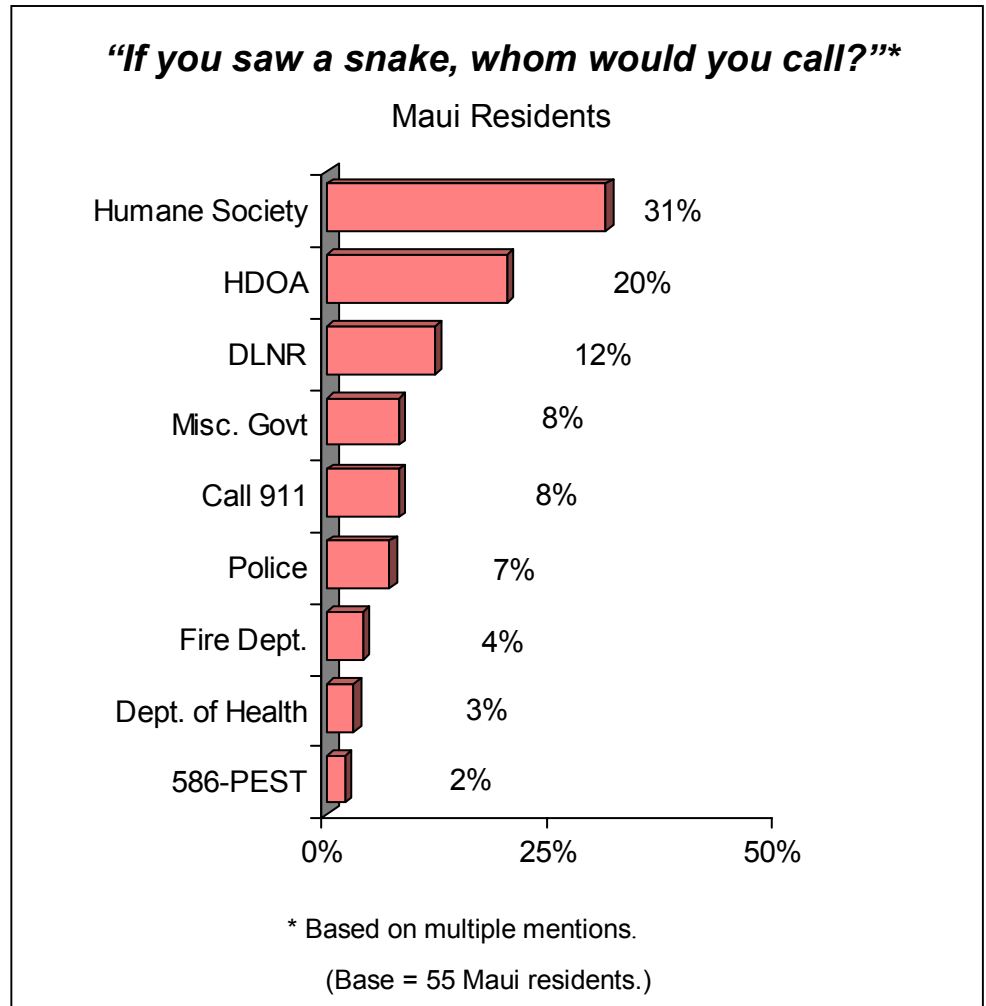


Reporting a Snake Sighting: Maui Residents Only

Asked about reporting a snake sighting, Maui residents did not differ greatly from Hawaii residents in their responses (see page 18 graph).

In reporting a snake, most Maui residents would call the *Humane Society*, the state *Department of Agriculture*, the *Department of Land and Natural Resources*, or other government agencies.

Maui residents were not more likely to call 911 (8%) than were statewide residents (10%).



Other Subsamples

Besides Maui residents, native Hawaiian residents, older (55+) adults and long-time residents of Hawaii (10+ years) show the greatest concern over the invasive species threat.

Young adults 18-34 and recent arrivals to Hawaii (< 10 years) show less urgency toward this issue.

- More older (55+) adults (45%) agreed that invasive species are a “very serious threat” than did adults 35-49 (39%) or young adults 18-34 (25%).
- More native Hawaiians (48%) than Japanese (40%), Caucasian (38%) or Filipino residents (26%) strongly agreed that “*some plants in our yards and gardens may... damage the ecosystem.*”

Subsamples (continued)

- Proportionally more Maui residents said they had heard of the *coqui frog* and the *miconia* (92% and 68%, respectively) than did those on Oahu (77% and 44%, respectively), the Big Island (67% and 43%) or Kauai (58% and 39%).
- Awareness of the *brown tree snake* is lower on Kauai (52%) than on Oahu (84%), Maui (85%) or the Big Island (81%).
- Willingness to report a *snake* sighting is high among all Hawaii residents.
- Willingness to report an *unknown insect*, though, varies by age, with more older (55+) adults saying they are “very likely” to do so (65%) than did adults 34-54 (51%) or young adults 18-34 (35%).

Subsamples (continued)

Relative to supporting *more funding for a statewide program to combat and prevent invasive species*, greatest support was found among:

- Native Hawaiian residents (57% said they were “strongly in favor”).
- Adults 55+ (48%); and
- Long-time (10+ years) residents (45%).

Less support, overall, for such funding was found among:

- Caucasian residents (32%)
- Adults 18-34 (30%); and
- Newcomers and recent Hawaii residents (27%).

Detailed Data Tables*

(omitted for privacy of participants)

* Boxed subsamples in the following tables signify that differences between the subsamples were statistically significant at the 95% level of confidence, and reflect differences in the population at large.