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Pests, Pathogens and the Public

*Key Findings From a National Voter Survey
Conducted September 22-27, 2010*

*Fairbank, Maslin, Maullin, Metz & Associates - FM3
Public Opinion Research & Strategy*

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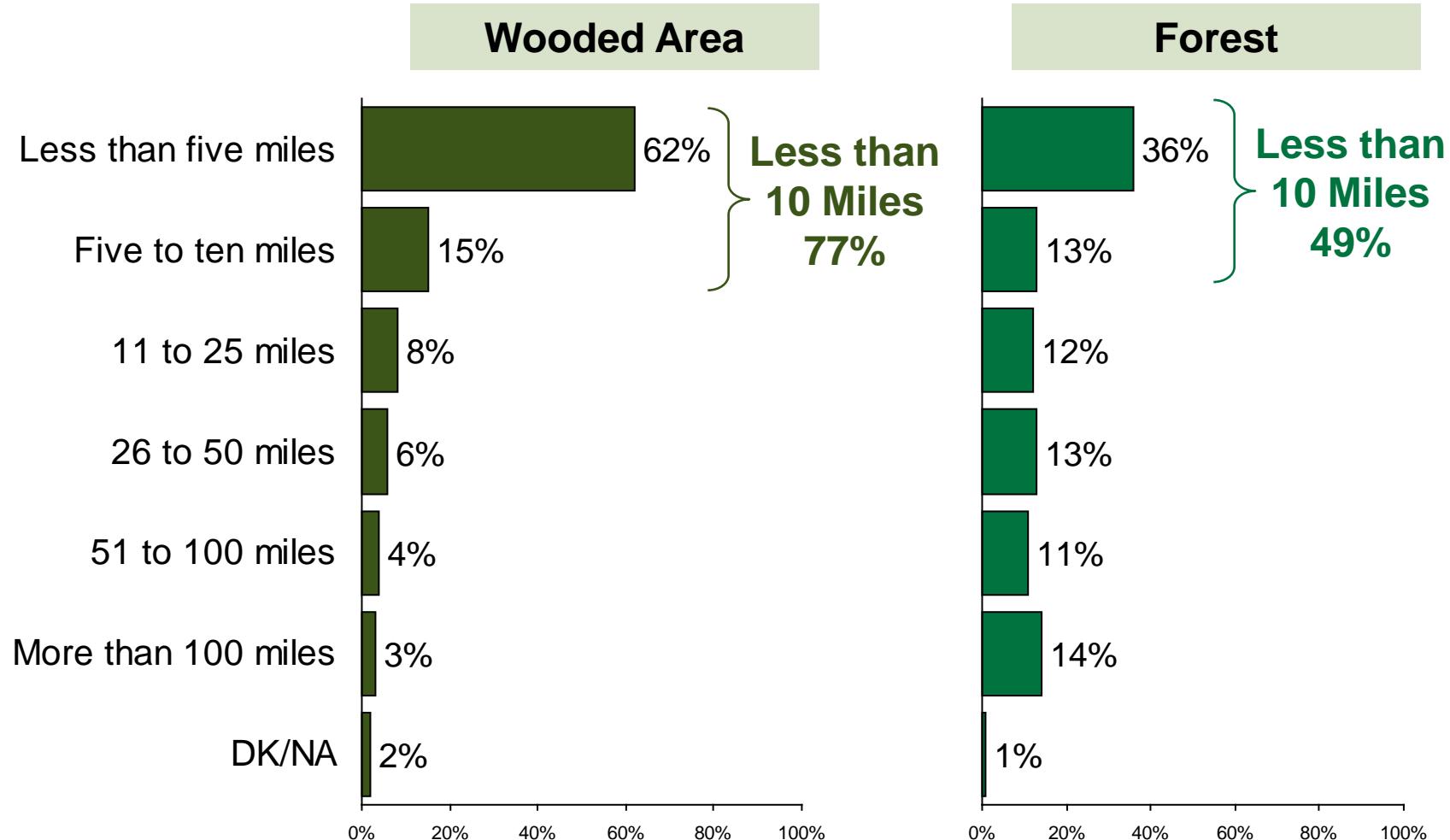
Methodology

- **Telephone survey of 1,400 American voters**
- **Base sample of 800 voters nationwide, with oversamples of 200 voters each in California; the Northeast; and the South**
- **Interviews conducted September 22-27, 2010**
- **Overall margin of sampling error of +/- 3.5%**
- **Preceded by three focus groups in California (Santa Cruz, Novato, and San Diego)**
- **Comparison from three prior national and regional surveys conducted in 2005 and 2007**

Americans and Trees

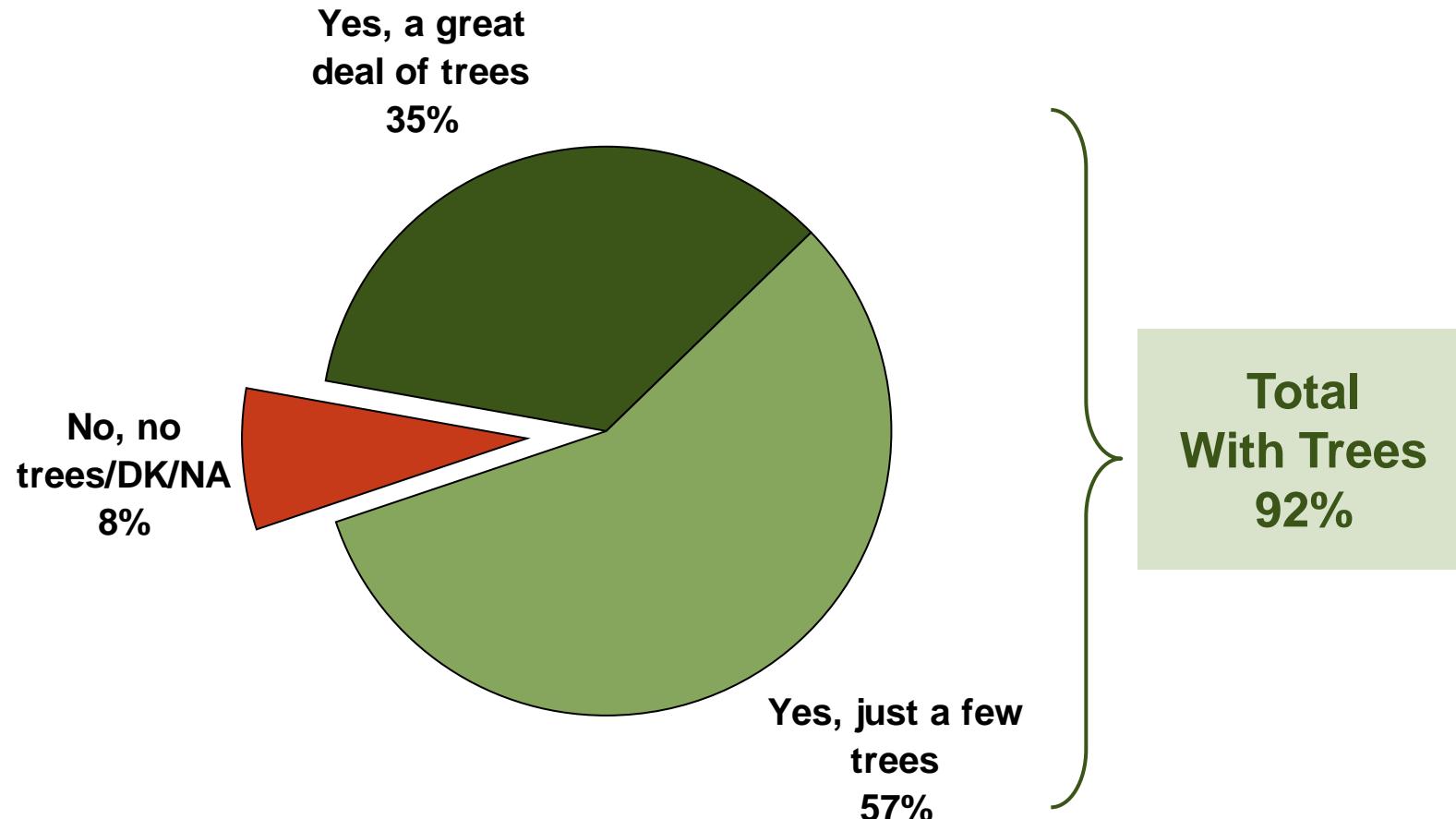
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A majority of voters live within 10 miles of a wooded area or forest...



...and most voters have trees on their properties.

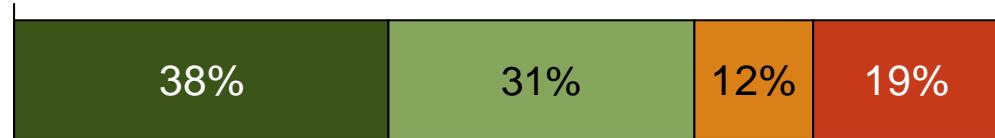
Do you have any trees in your yard or on your property?



Americans also participate in a variety of activities that bring them in contact with trees.

■ Freq. ■ Occas. ■ Rarely ■ Not At All/DK/NA

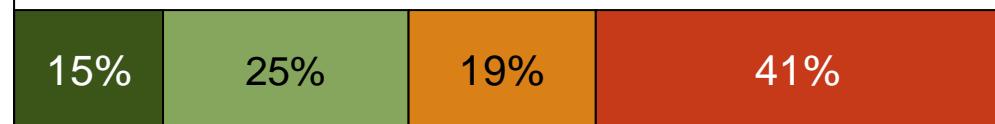
Gardening at your home



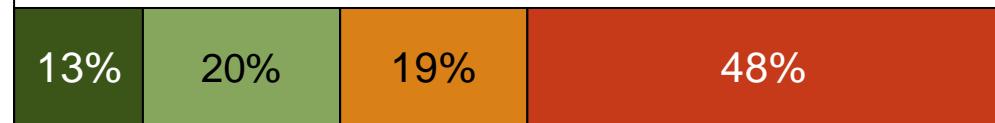
Viewing wildlife or birding



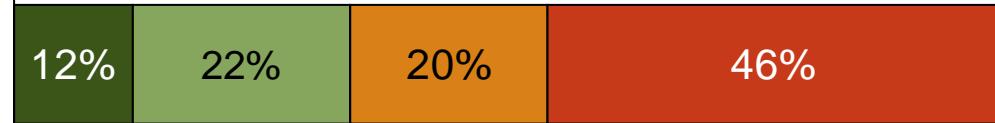
Hiking on unpaved or forest trails



Fishing



Going to a vacation home or cabin in a wooded location



Camping overnight



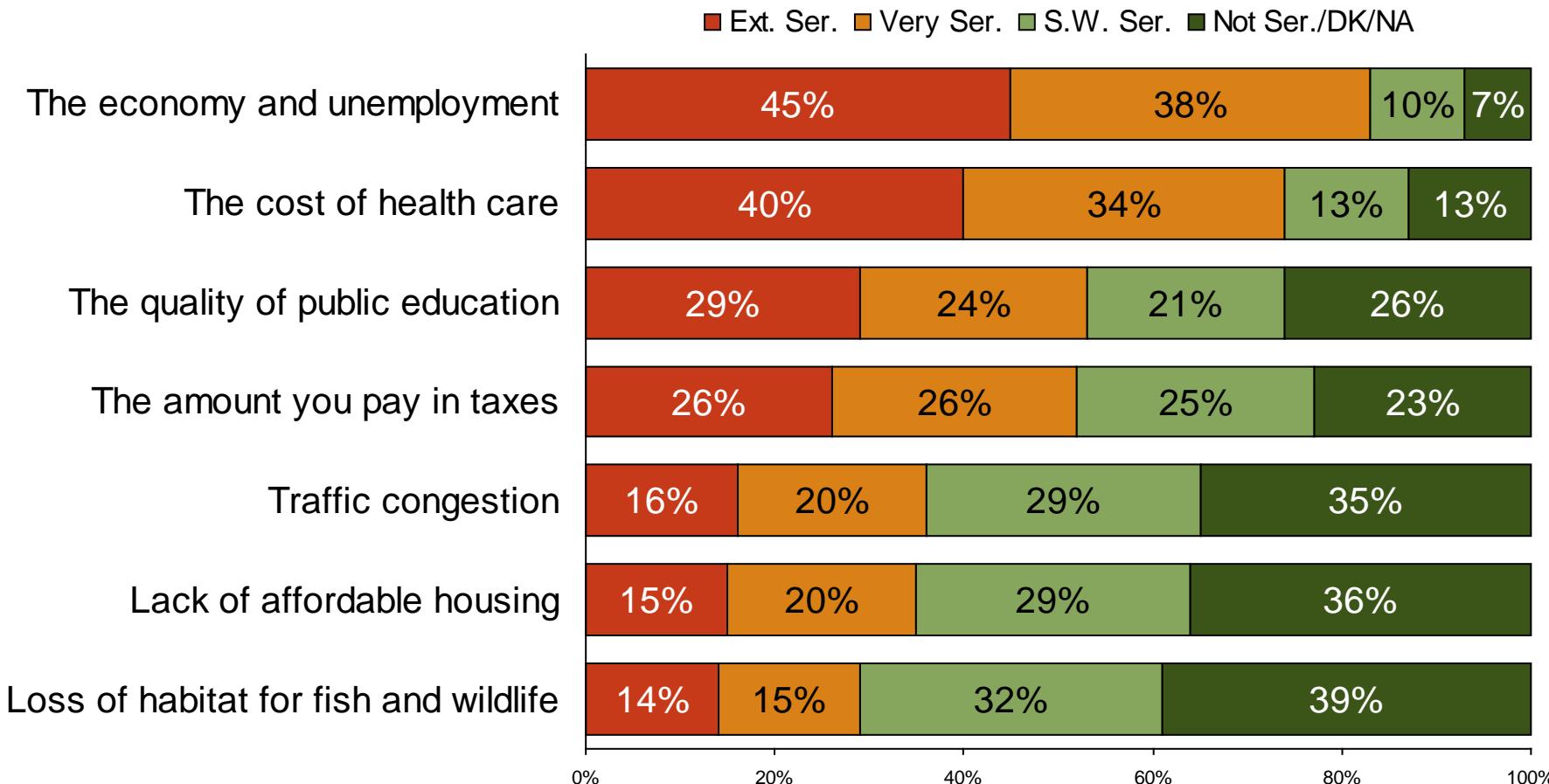
0% 20% 40% 60% 80% 100%

Awareness and Perceptions of the Problem

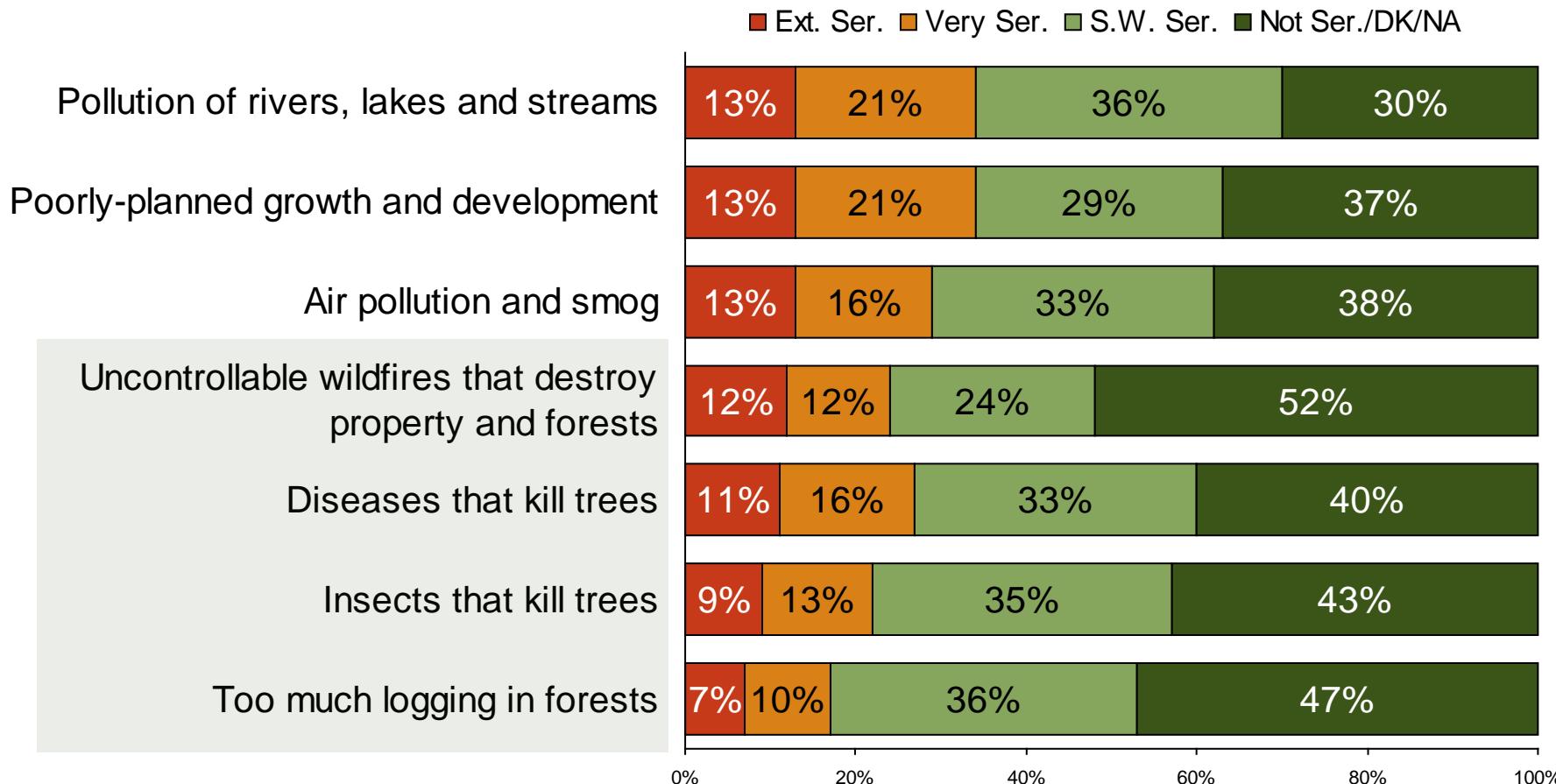
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Voters are chiefly concerned about economic issues...



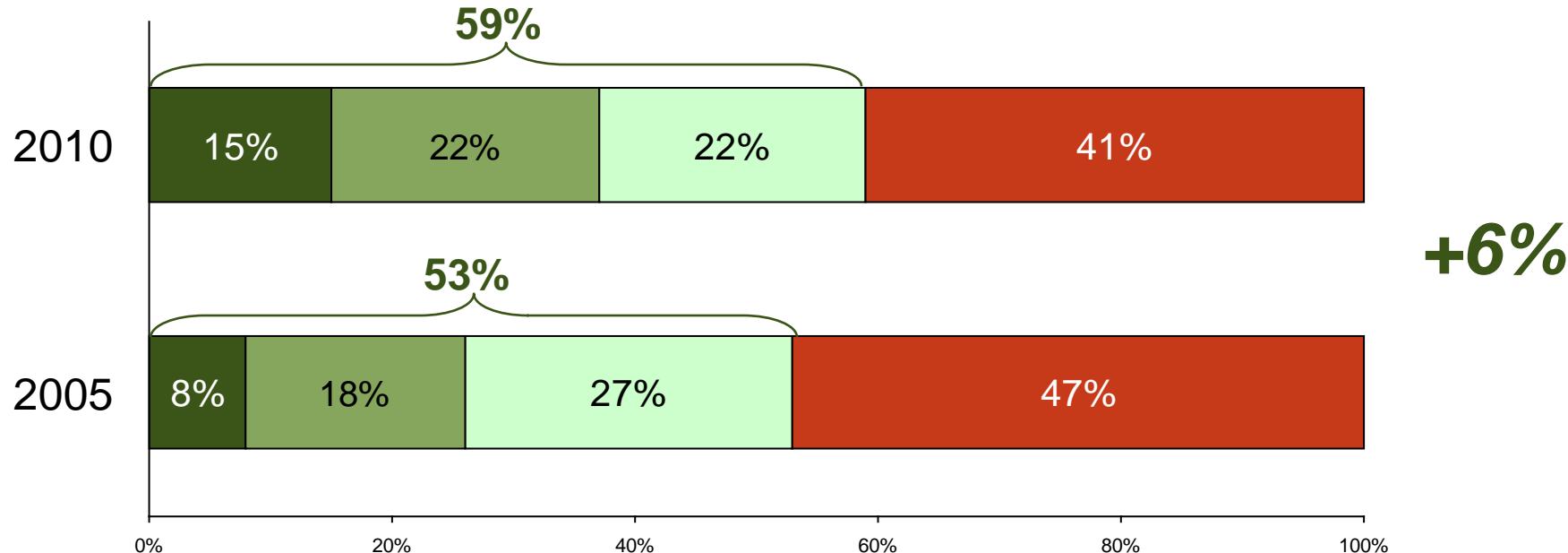
...and threats to trees are not nearly as concerning.



Awareness of the problem has increased over the past five years...

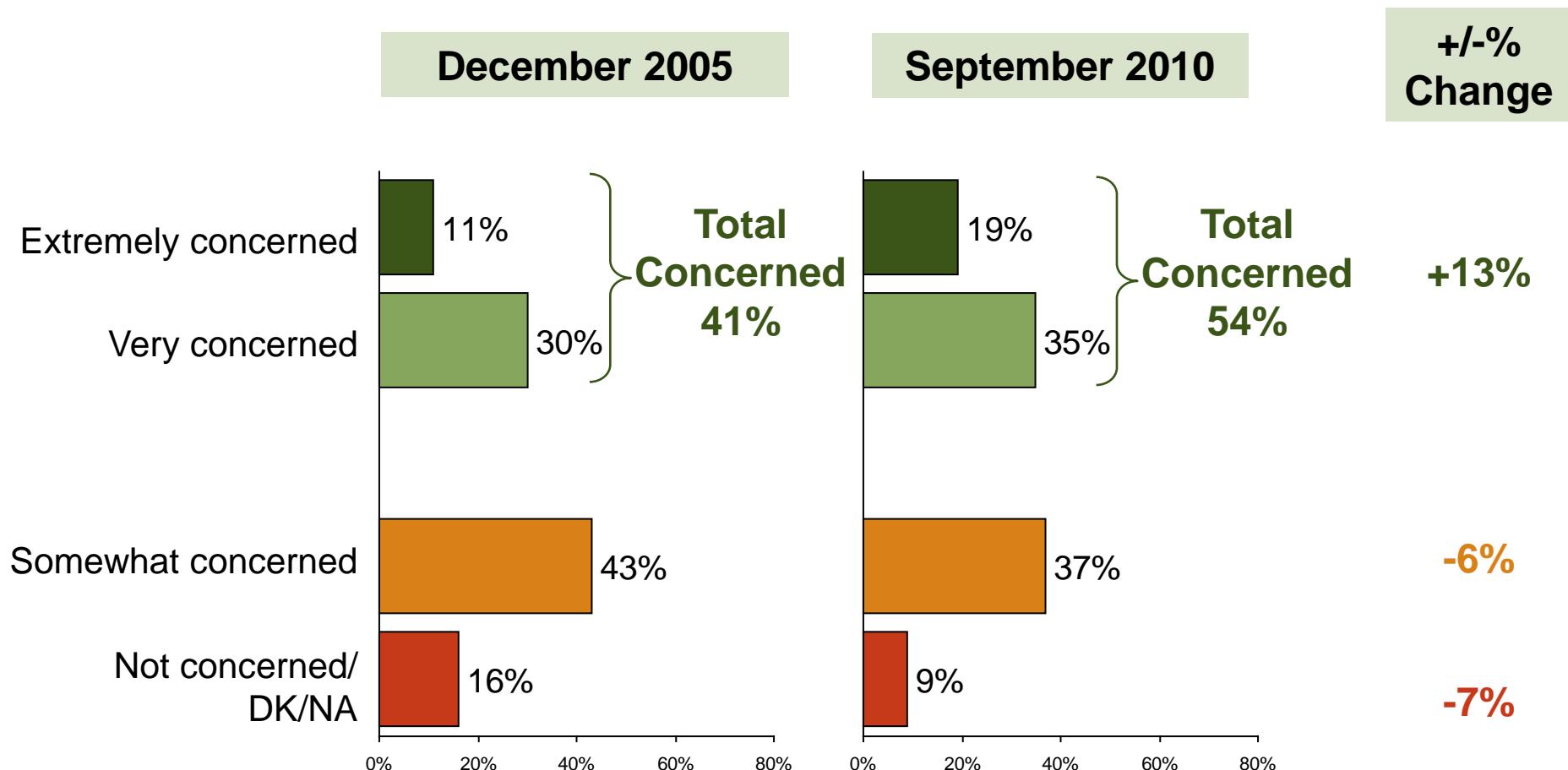
In different places across the country, there have been problems with non-native insects and diseases infesting or killing large numbers of trees. Have you heard anything about this issue?

■ Yes, heard a lot ■ Yes, heard a fair amount ■ Yes, heard a little ■ No, haven't heard anything/DK/NA



...and concern has increased as well.

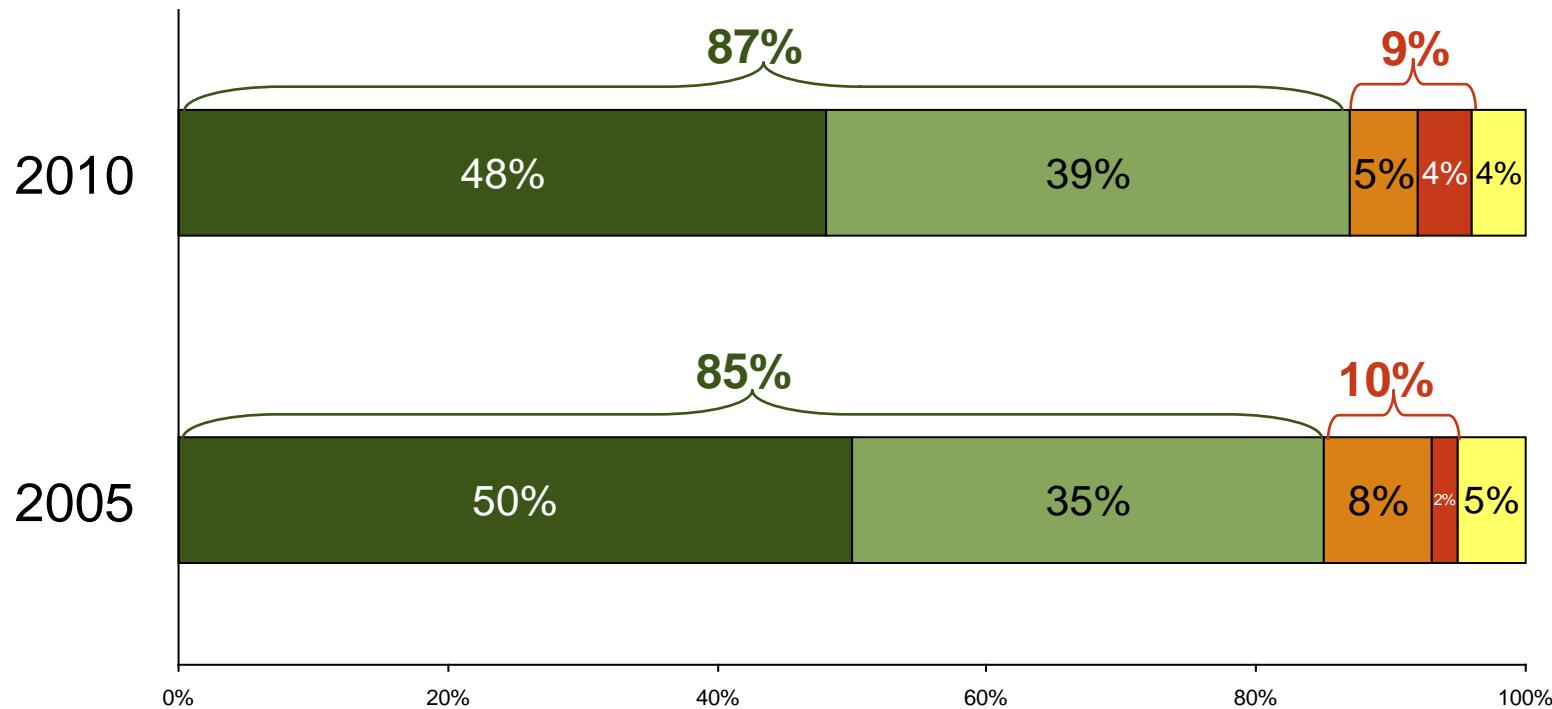
How concerned are you about insects and diseases that are killing large numbers of trees across the United States:



There is widespread awareness of the damage that non-native species can do.

“Non-native plants, insects, and animals can do great damage when they are introduced to a new area.”

■ Strng. Agr. ■ S.W. Agr. ■ S.W. Disagr. ■ Strng. Disagr. ■ DK/NA

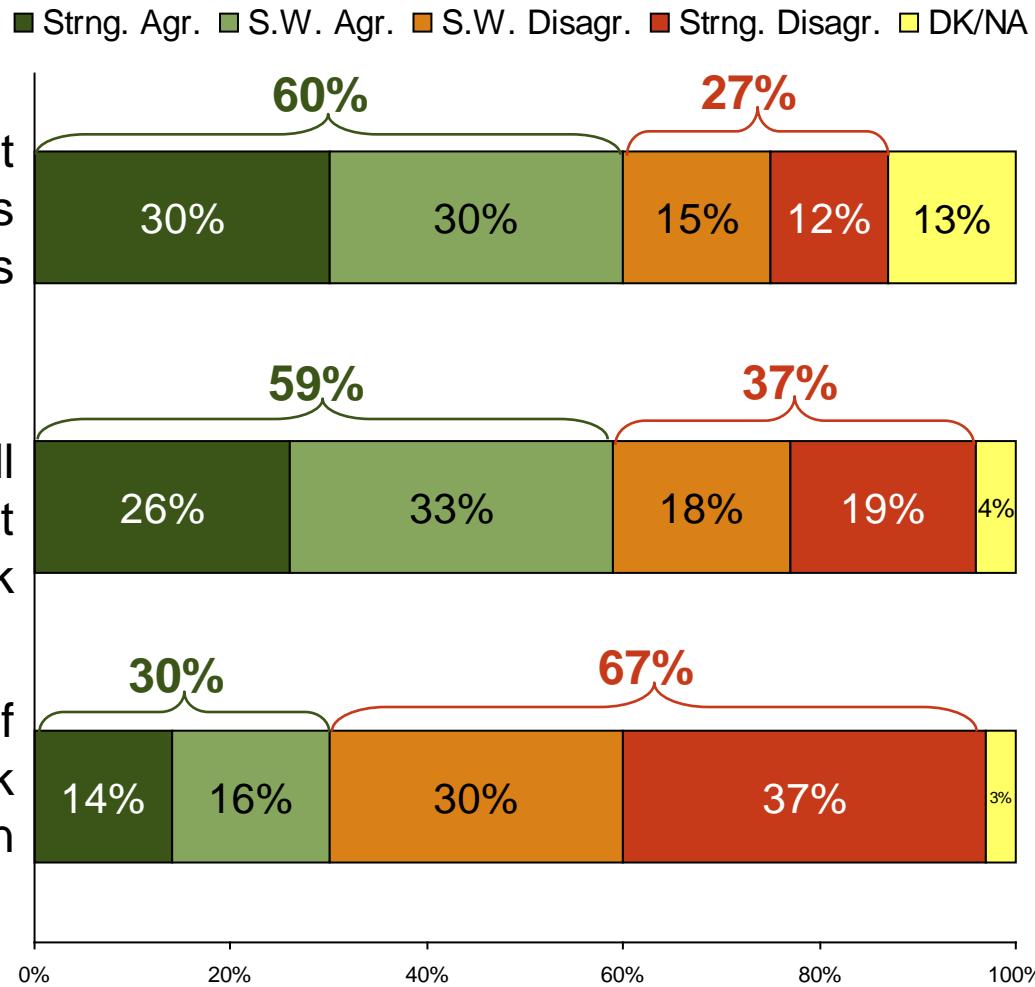


At the same time, voters hold some beliefs that may mitigate their concern.

Native insects and diseases are just as big a threat to American trees as non-native ones

It's sad when bugs or diseases kill trees, but it's just a natural process at work

If an area loses a large number of trees, they almost always grow back on their own

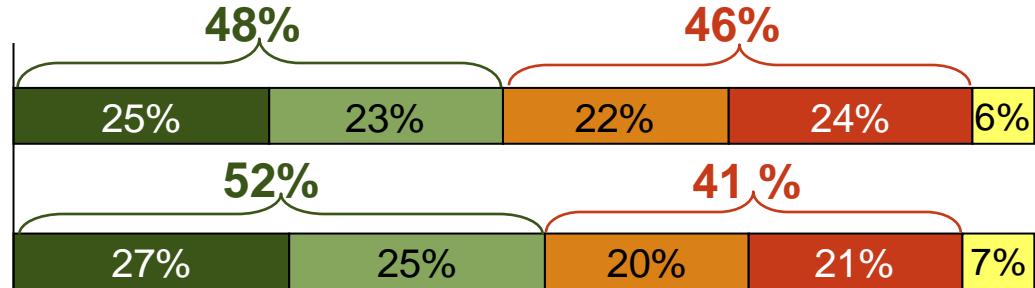


Fewer than half of voters nationwide perceive significant impacts in their area.

I know of areas in my neighborhood or town where trees have died from disease or insects

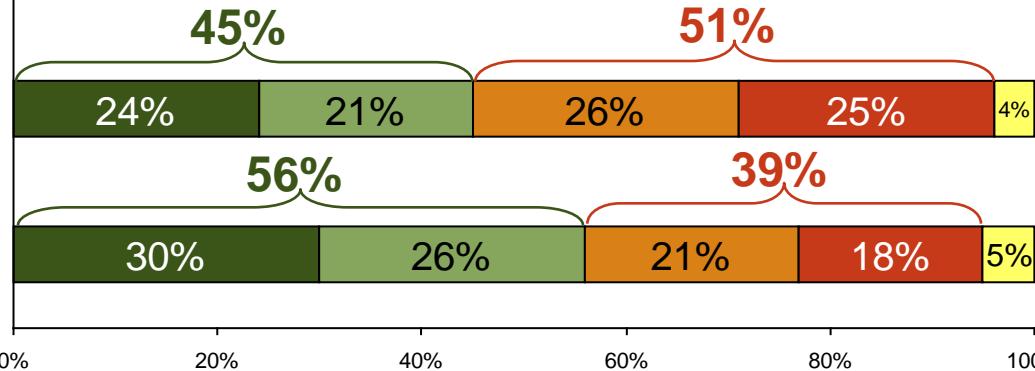
2010
2005

■ Strng. Agr. ■ S.W. Agr. ■ S.W. Disagr. ■ Strng. Disagr. ■ DK/NA



Forests and trees are disappearing quickly in my area of the country

2010
2005



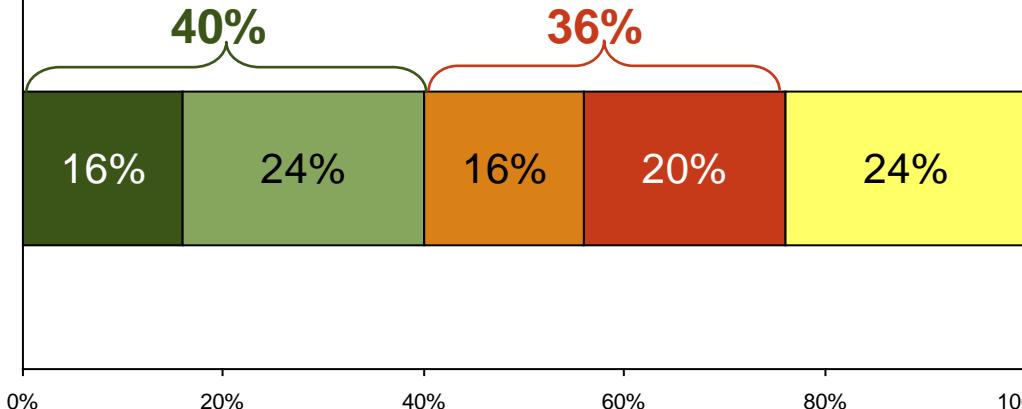
Only a minority of voters think the federal government has taken effective action.

The federal government is actively working to keep invasive insects and diseases affecting trees from entering the country

■ Strng. Agr. ■ S.W. Agr. ■ S.W. Disagr. ■ Strng. Disagr. ■ DK/NA



The federal government has done a good job of keeping invasive insects and diseases affecting trees from entering the country



Awareness of Specific Pests

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Nationally, awareness of a few invasives has changed little.

Dutch Elm Disease

2010
2005

■ Yes, a lot ■ Yes, fair amount ■ Yes, little ■ No/DK/NA

19% 22% 17% 42%

19% 19% 22% 40%

%
Aware

58%

60%

Gypsy Moth

2010
2005

16% 24% 19% 41%

18% 22% 22% 38%

59%

62%

Chestnut Blight

2010
2005

5% 8% 12% 75%

6% 8% 15% 71%

25%

29%

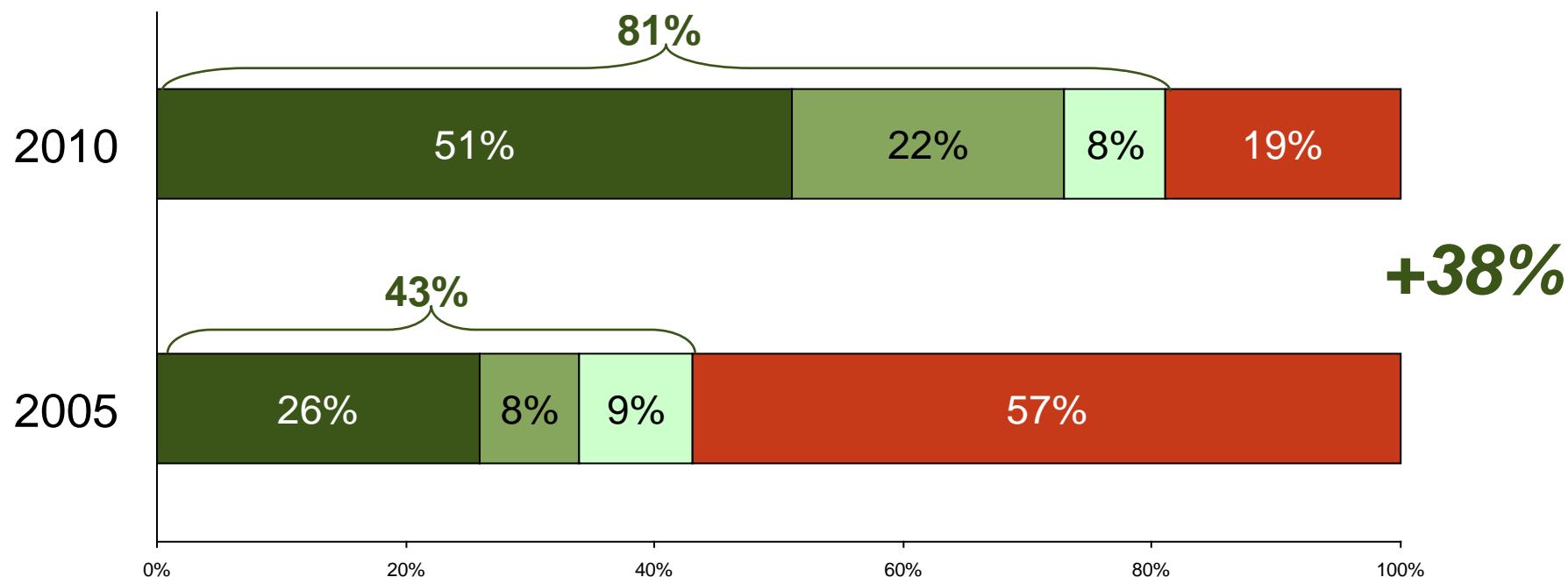
0% 20% 40% 60% 80% 100%

EAB awareness is up dramatically.

(Indiana and Michigan Comparisons to 2005)

Emerald Ash Borer

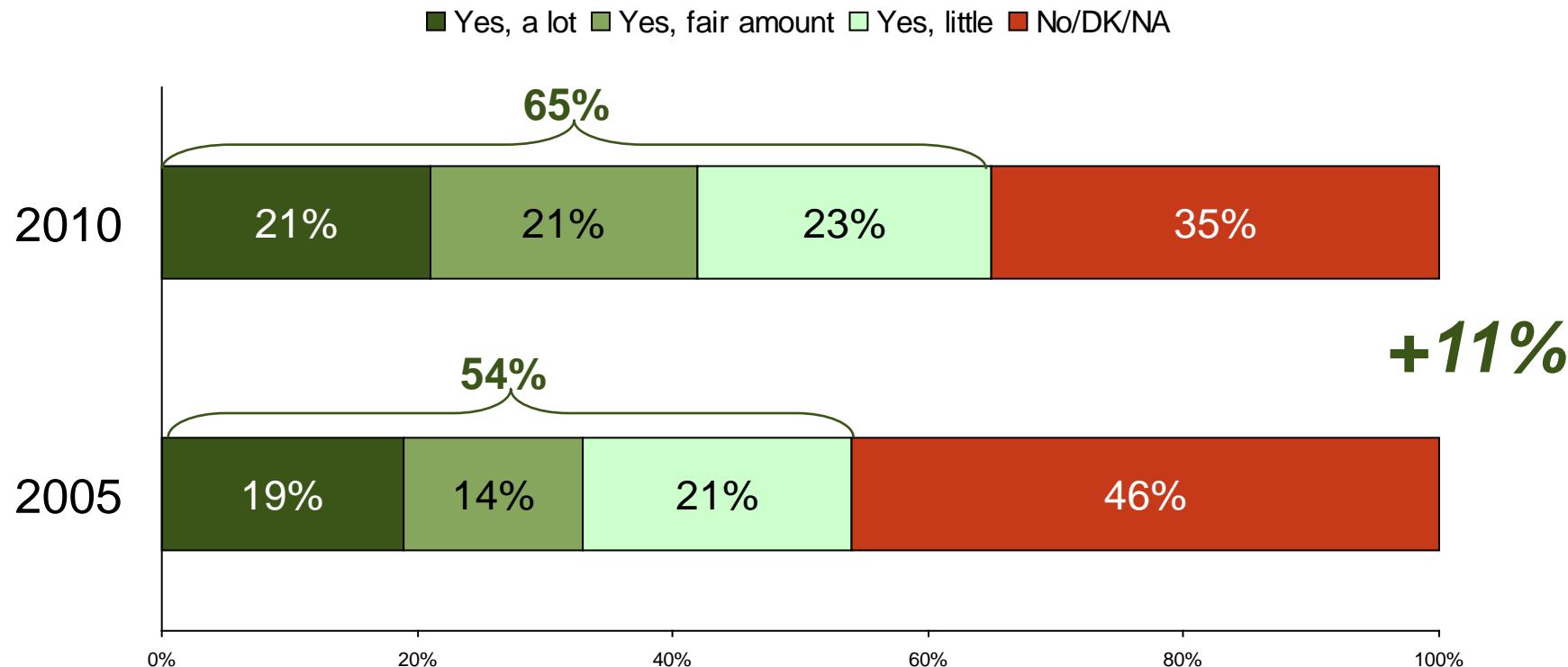
■ Yes, a lot ■ Yes, fair amount ■ Yes, little ■ No/DK/NA



ALB awareness is up in affected areas.

(New York, New Jersey and Illinois Comparisons to 2005)

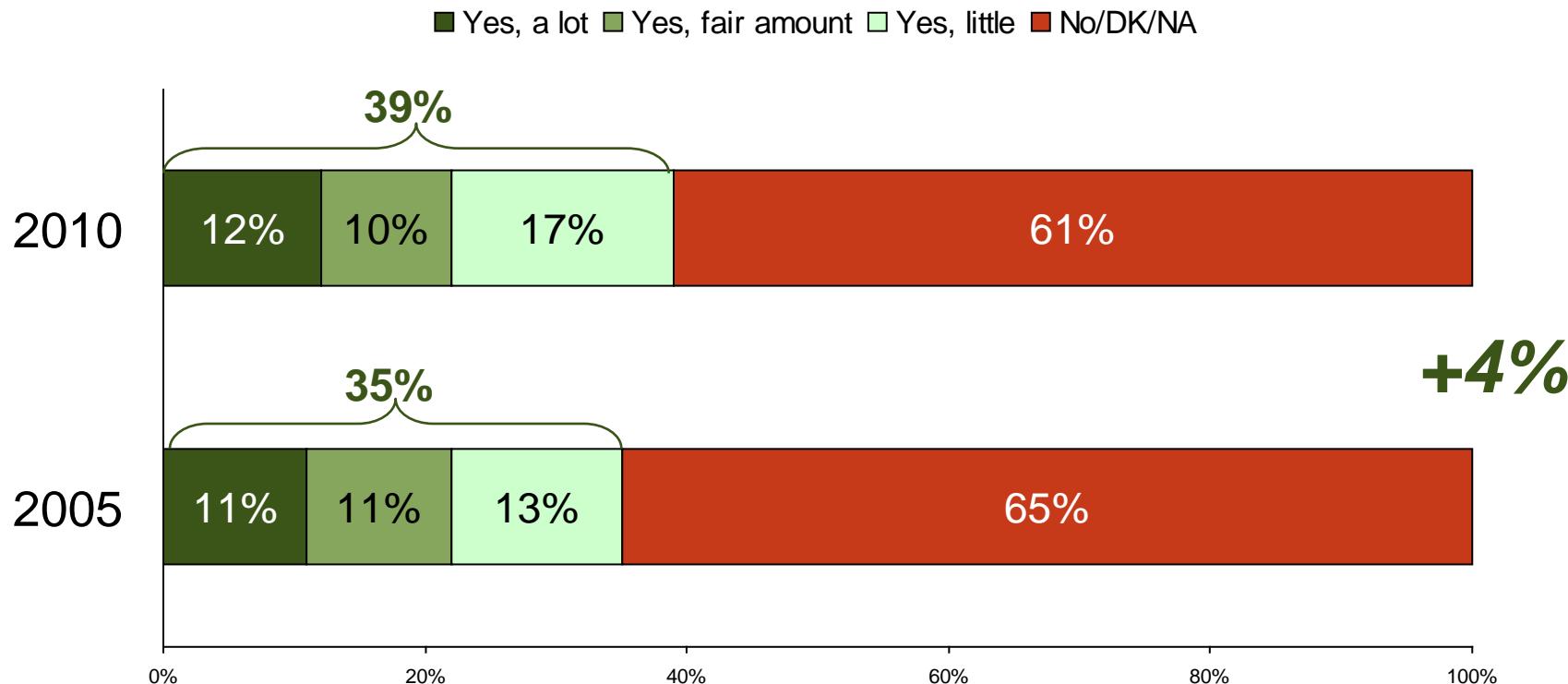
Asian Longhorned Beetle



Awareness of Sudden Oak Death on the Pacific Coast has changed little.

(California, Oregon and Washington Comparisons to 2005)

Sudden Oak Death



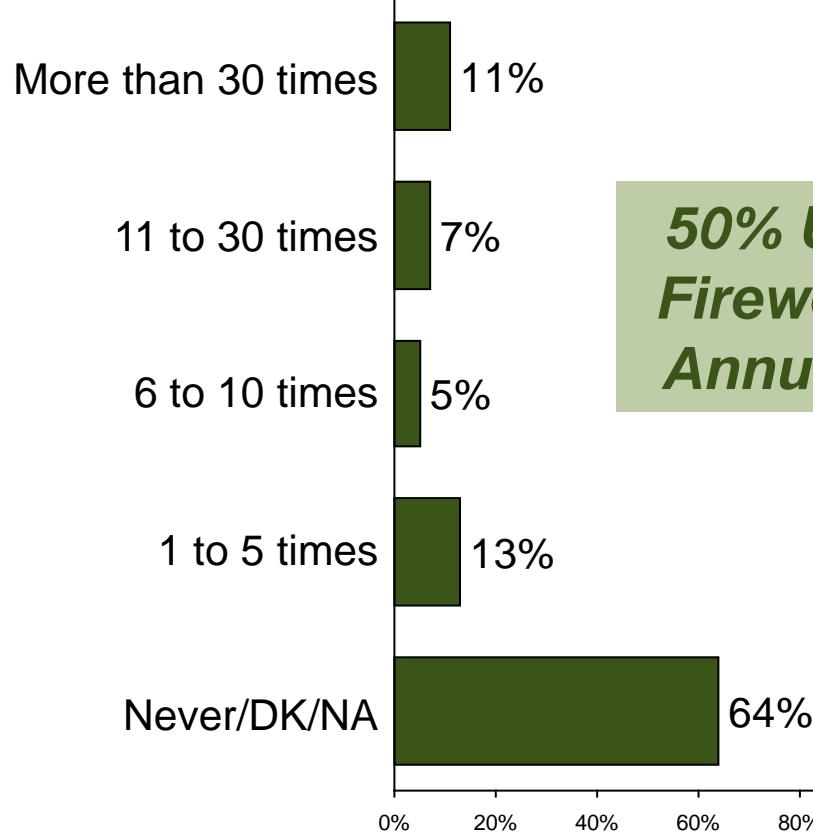
Patterns of Firewood Use

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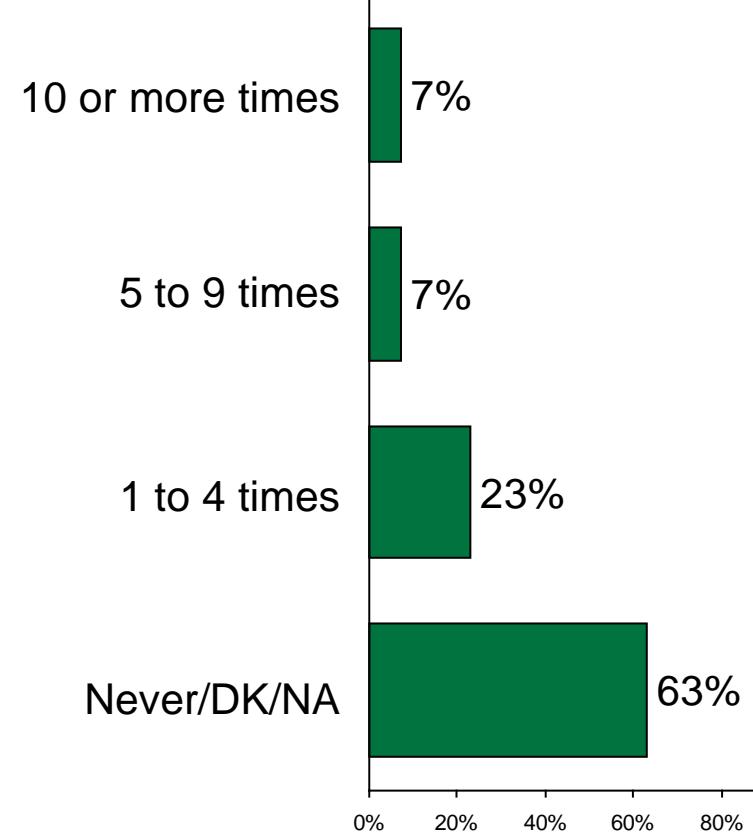


Respondents were more likely to use firewood outdoors than indoors.

In or Around the Home

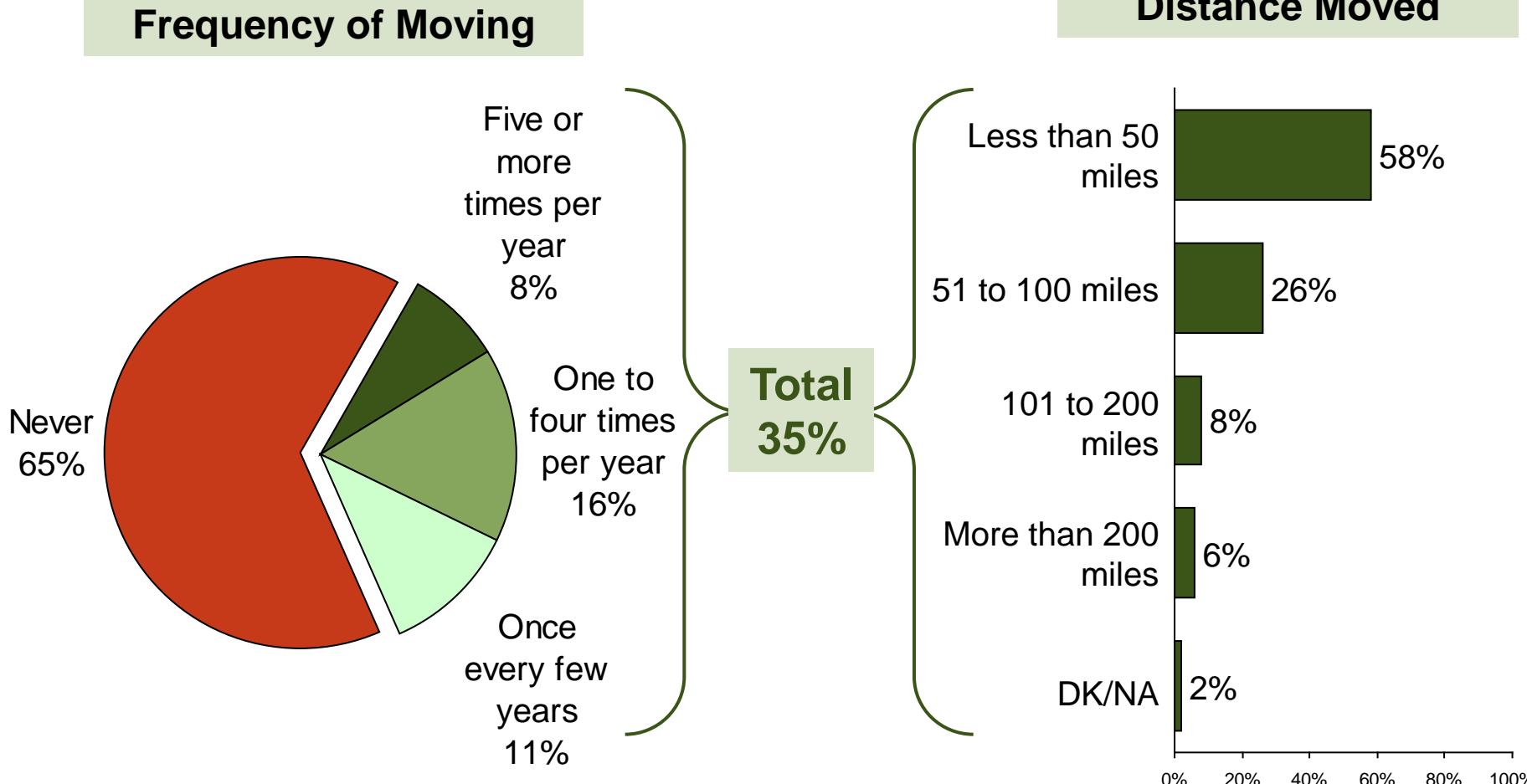


Outdoors



**50% Use
Firewood
Annually**

Nearly half of firewood users move firewood at least occasionally.



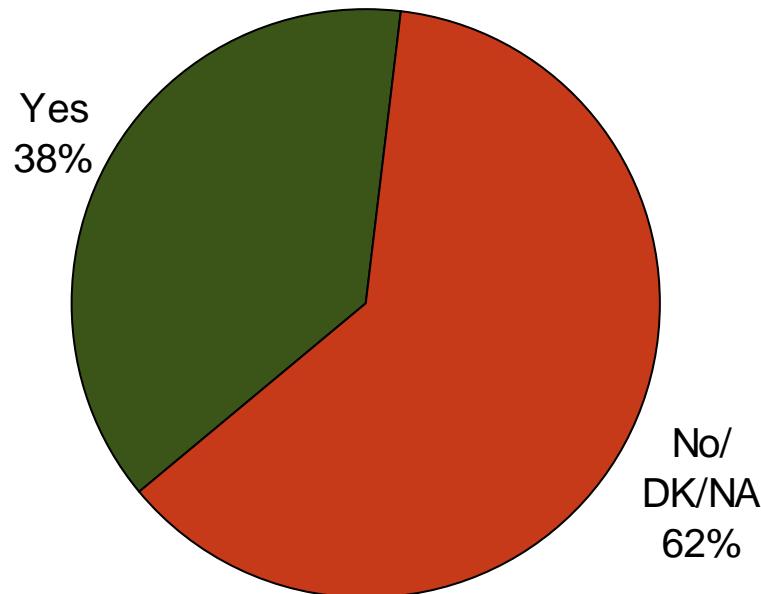
7. How often do you bring firewood from one location to use in another location – like bringing it from home to a campsite or vacation house, or from a vacation area back to your home:

8. When you use firewood you brought from another location, how far have you typically transported it:

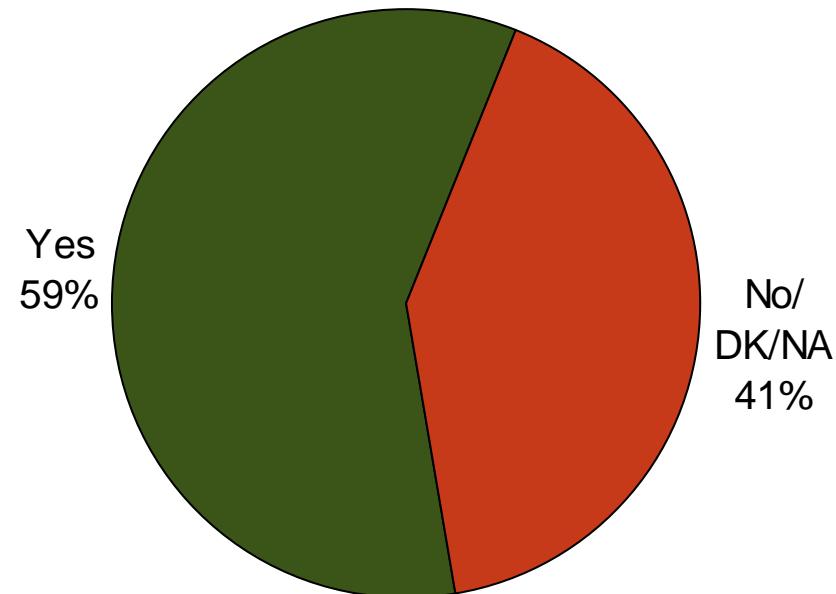
In the Northeast and upper Midwest, awareness of messages urging people not to move firewood is up.

Have you ever seen, heard, or read any information urging the public not to move firewood from place to place?

December 2007

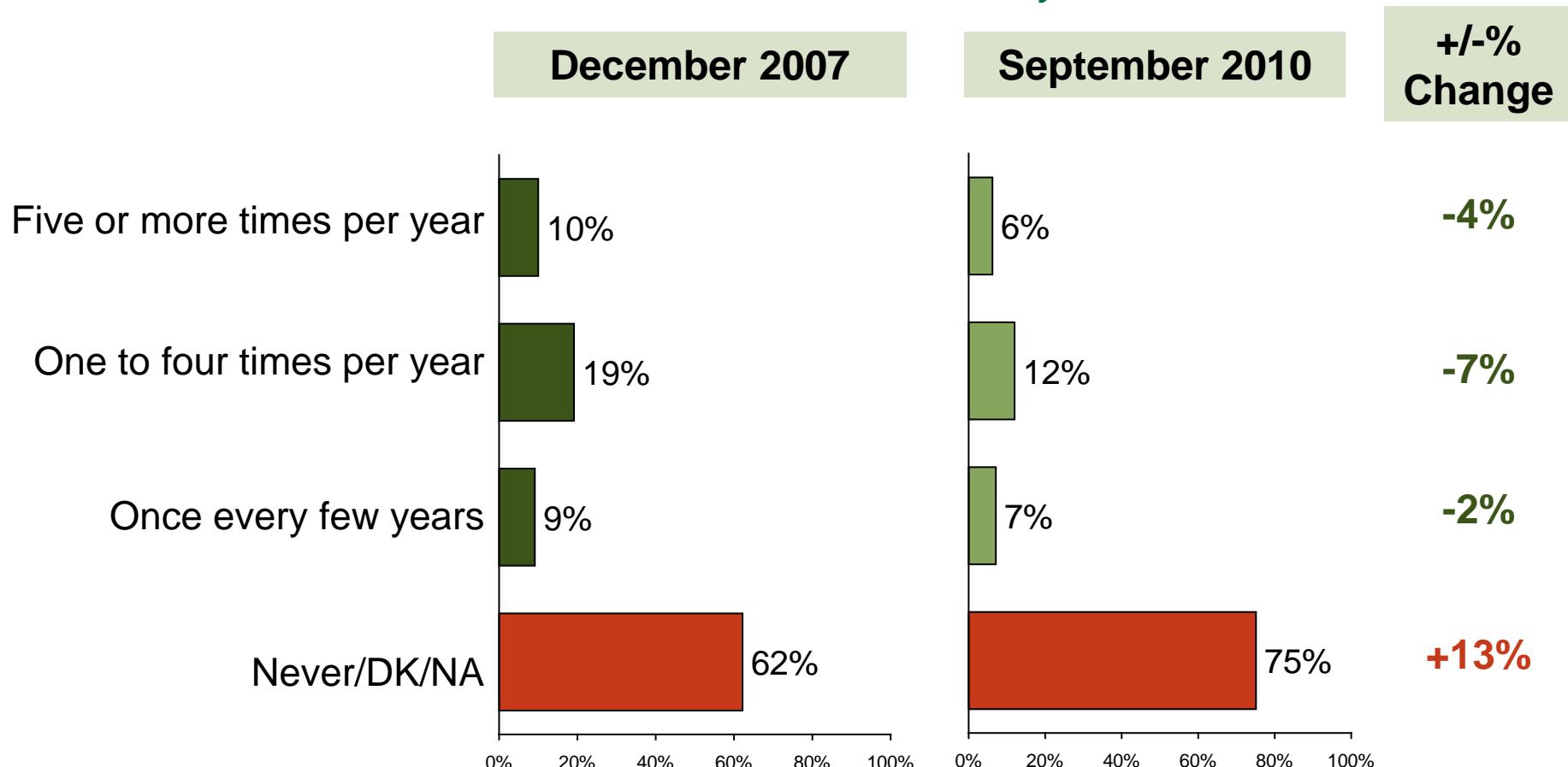


September 2010



Regionally, there has been a reduction in firewood movement since 2007.

How often do you bring firewood from one location to use in another location – like bringing it from home to a campsite or vacation house, or from a vacation area back to your home:



Behaviors and Policies



Voters express great willingness to modify their behavior.

Buying plants and trees only from nurseries that are certified as free from diseases and insects that kill trees

■ Very Willing ■ S.W.Willing ■ Not Willing/DK/NA

Cleaning your boots carefully after hiking in a forest



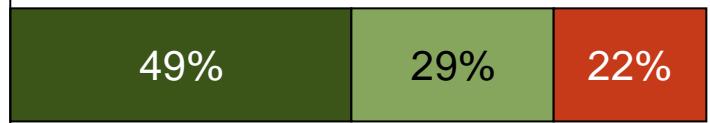
Buying or cutting firewood only near where you plan to use it, and not transporting it from place to place



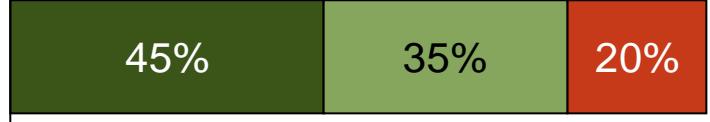
*Not taking plants or cuttings from another location to bring back to your home or garden



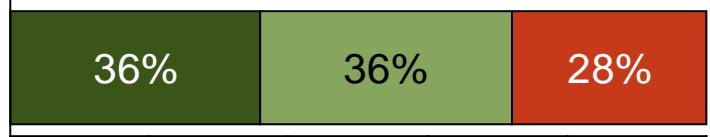
*Cleaning your bicycle carefully after riding on trails or unpaved roads



*Cleaning your truck, jeep, SUV or ATV carefully after driving or riding on trails or unpaved roads



*Not taking plants or cuttings from a friend to bring back to your home or garden



0% 20% 40% 60% 80% 100%

Voters back a variety of policy approaches – except taxes.

Creating government incentives for nurseries to follow practices minimizing the spread of insects and diseases.

Increasing federal funding to eradicate and stop the spread of three of the most dangerous non-native insects and diseases by 500 million dollars per year.

^Limiting trade with other countries to keep non-native insects and diseases out.

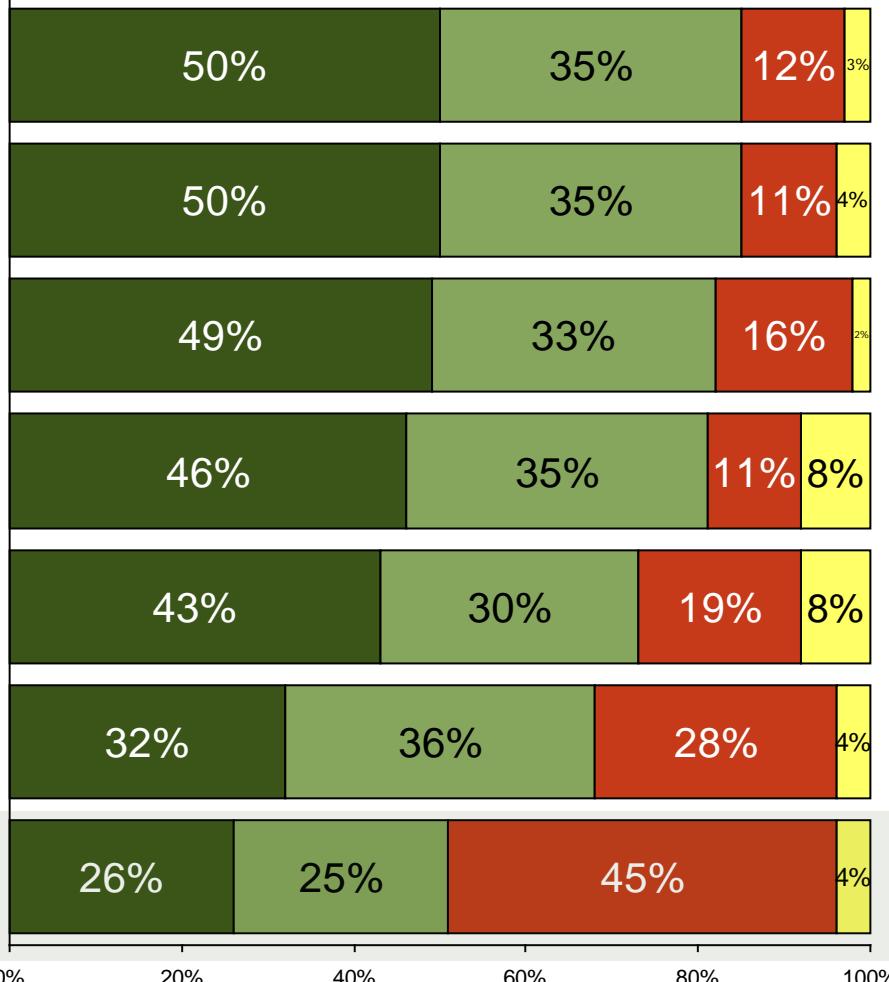
Publicizing the availability of free firewood on-site with your reservation at any private, state park, and state land campgrounds.

Creating an official, but voluntary, state certification for firewood that is free of insects or diseases.

Increasing park visitor fees to raise money to fight the spread of insects and diseases.

Placing a state tax on firewood sales to raise money to fight the spread of insects and diseases.

■ Strng. Supp. ■ S.W. Supp. ■ S.W./Strng. Opp. ■ DK/NA



Messaging, Messengers and Images

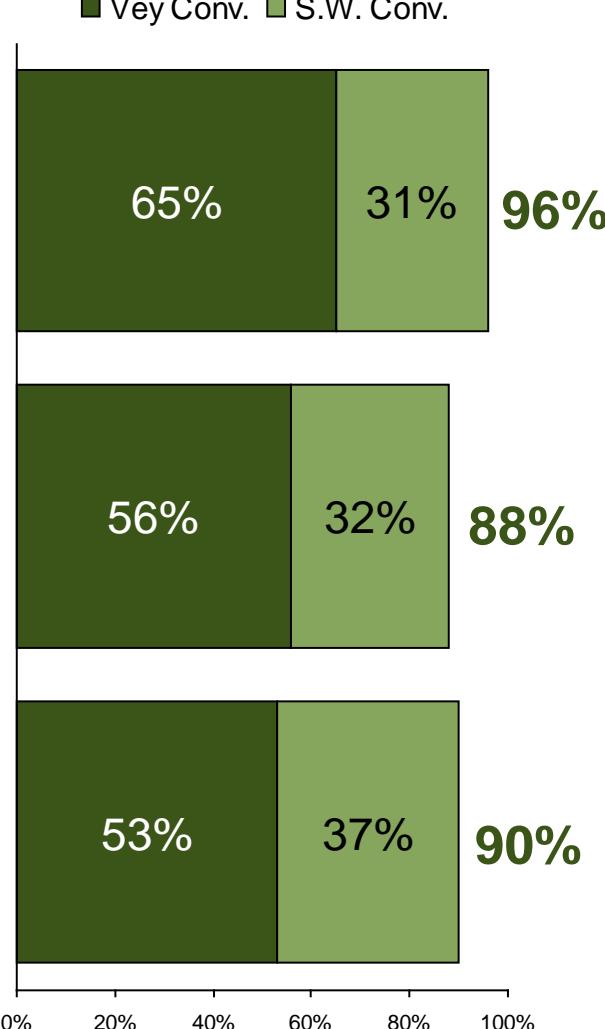


Messaging related to quality of life and prevention is effective.

(QUALITY OF LIFE - FORESTS) Trees are essential to our quality of life. They make our communities more beautiful, provide places for children to play and learn about nature, and stay with us across the generations. We must do what it takes to protect them.

(QUALITY OF LIFE - NEIGHBORHOODS) The trees that can be found in and around our communities, in our yards and along our streets, are a major part of what gives us nice places to live. Insects and diseases that threaten these trees can change the character of a neighborhood for decades.

(PREVENTION) An ounce of prevention is worth a pound of cure. Taking action now to prevent introductions of deadly insects and diseases on plants and other goods from overseas before they are allowed into our country is the most efficient and cost-effective way to protect our trees.

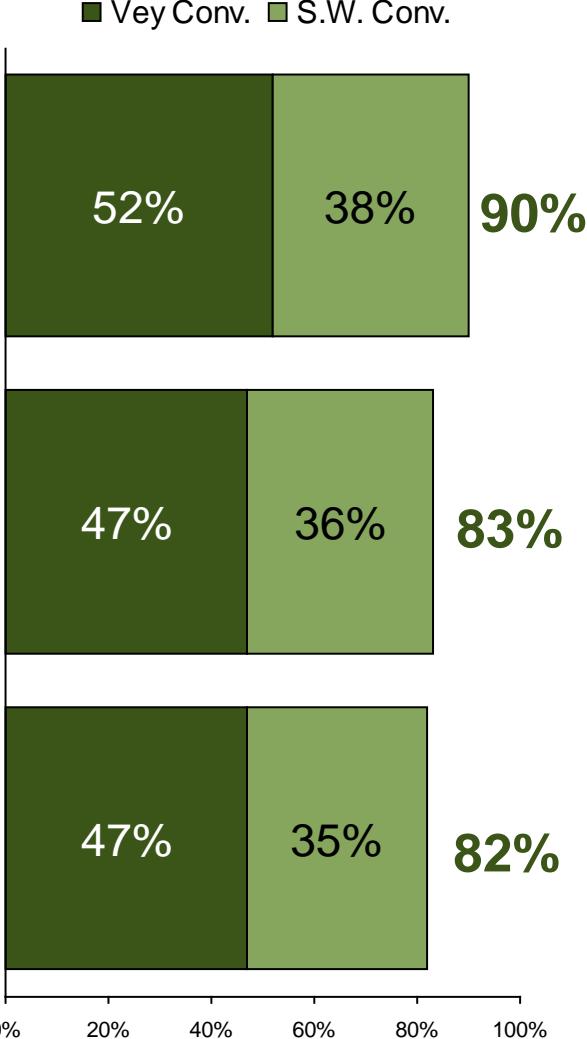


Continued

(CLEAN AIR AND WATER) Forests play a critical role in providing natural filters that give us clean air, and are also sources of much of the nation's clean drinking water. Insects and diseases that destroy these forests can end up threatening our clean air, clean water, and public health.

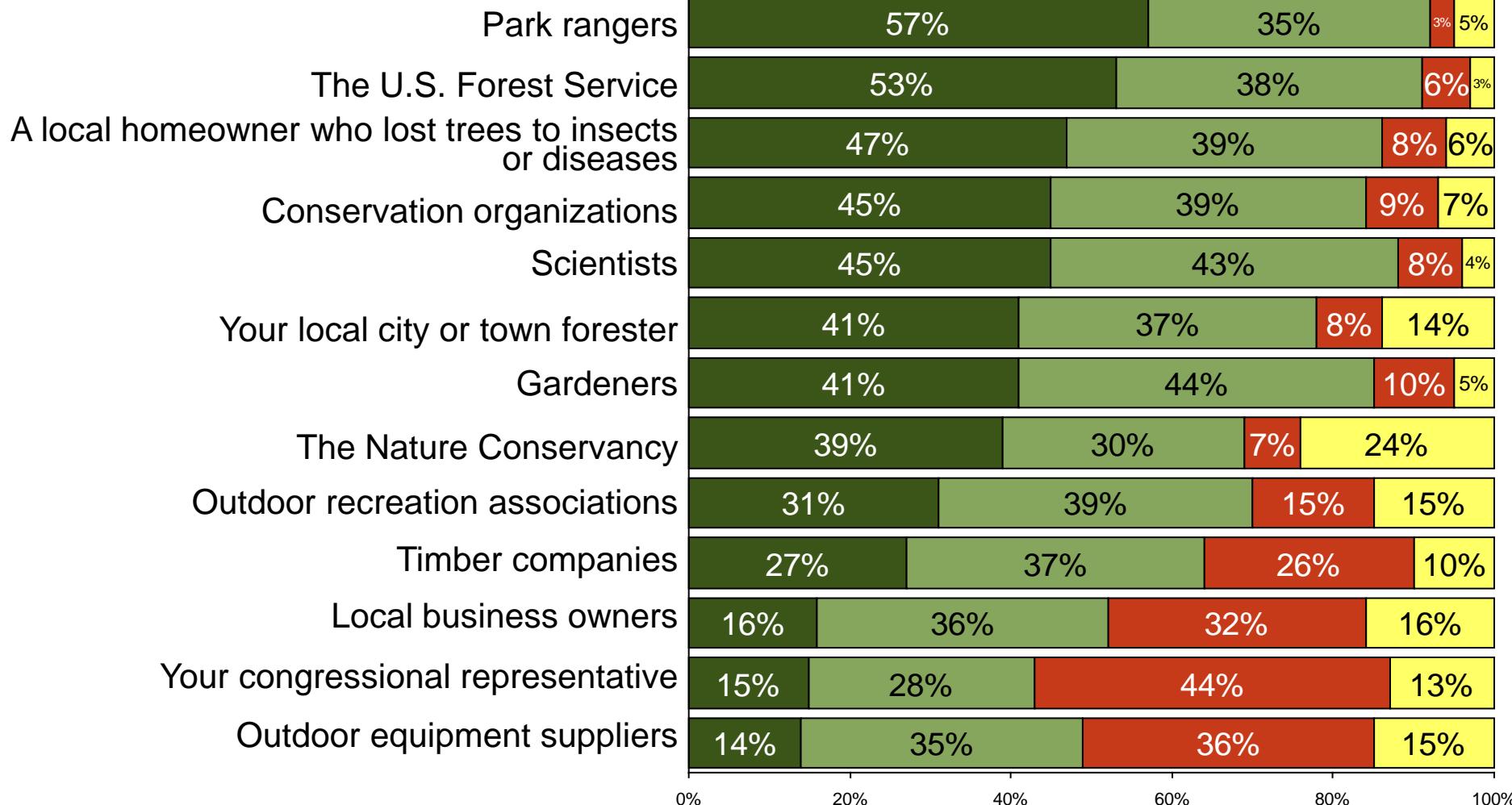
(NATURAL BALANCE) Foreign invasive pests affect the natural balance here in the United States. And our forests and trees are like canaries in a coal mine: when they get sick, threats to human health cannot be far off. Trees and forests clean the air and water, and anything that hurts trees and forests eventually affects people.

(UNKNOWN IMPACTS) We just cannot know what impact a new foreign insect or disease will have when brought to our forests. It could wipe out entire forests, costing us jobs and threatening our air and water quality. The only safe strategy is to keep these insects and diseases from ever being brought here.



Park rangers and the forest service are highly credible.

■ Very Believ. ■ S.W. Believ. ■ Not Too/Not At All Believ. ■ DK/No Opin./NHO



Average Score on 0-to-10 Concern Scale: **8.8**

Light Brown Apple Moth



“Here you can see an extensive look at the damage.”

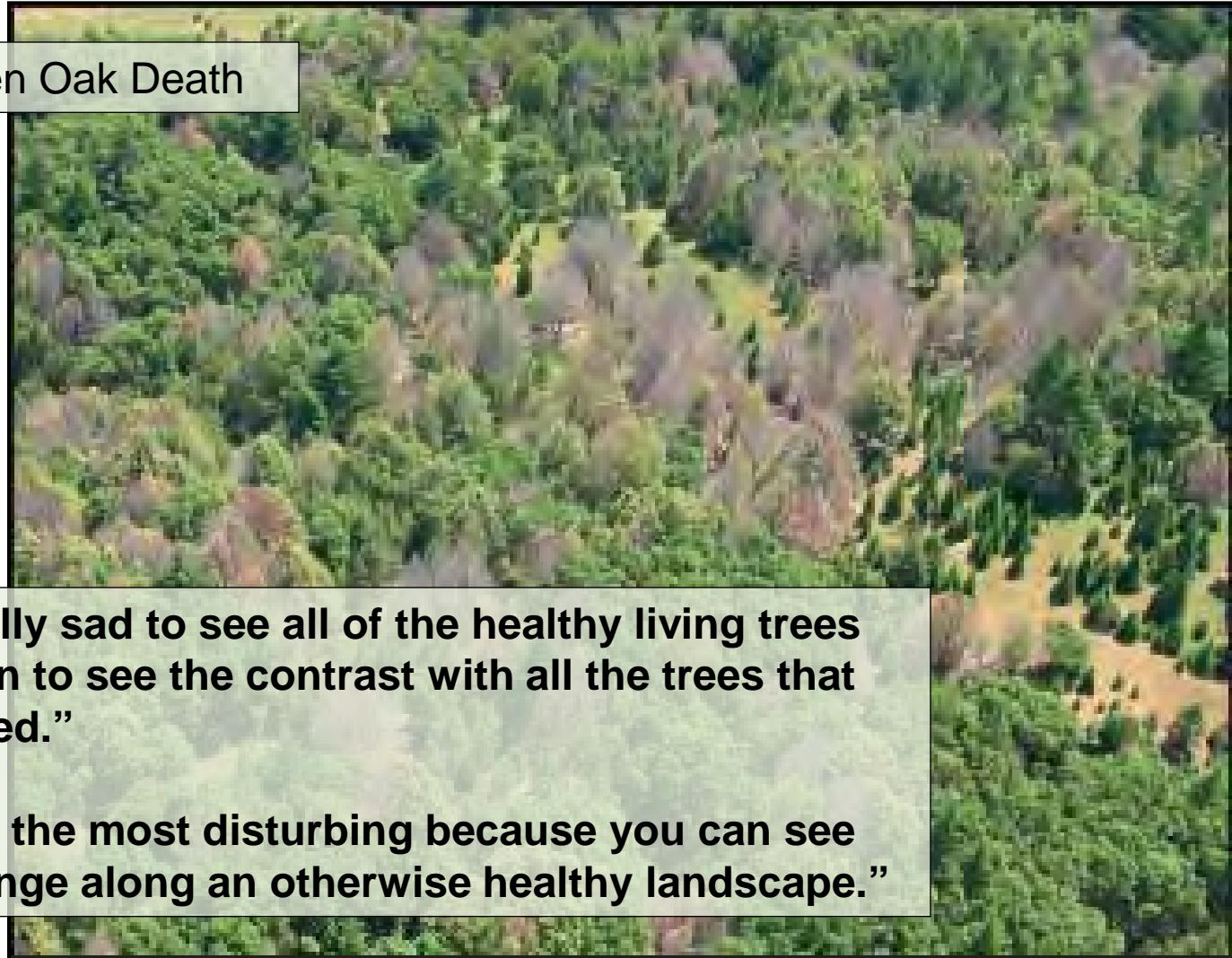
“It looks like the plant is being ruined and the life of the plant could be at stake.”

Average Score on 0-to-10 Concern Scale: **8.4**

Sudden Oak Death

“It's really sad to see all of the healthy living trees and then to see the contrast with all the trees that have died.”

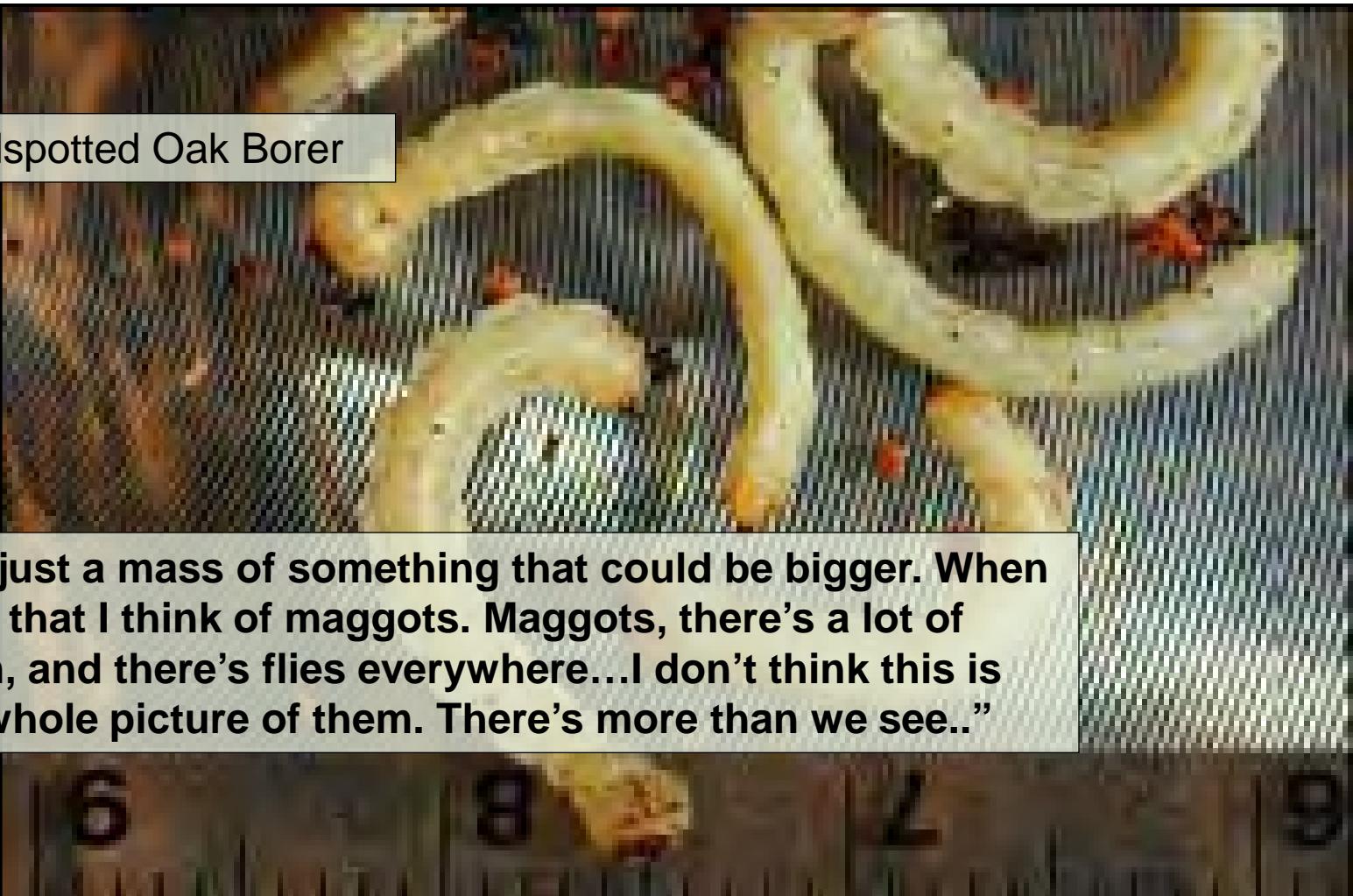
“This is the most disturbing because you can see the change along an otherwise healthy landscape.”



Average Score on 0-to-10 Concern Scale: 8.1

Goldspotted Oak Borer

“It’s just a mass of something that could be bigger. When I see that I think of maggots. Maggots, there’s a lot of them, and there’s flies everywhere...I don’t think this is the whole picture of them. There’s more than we see..”

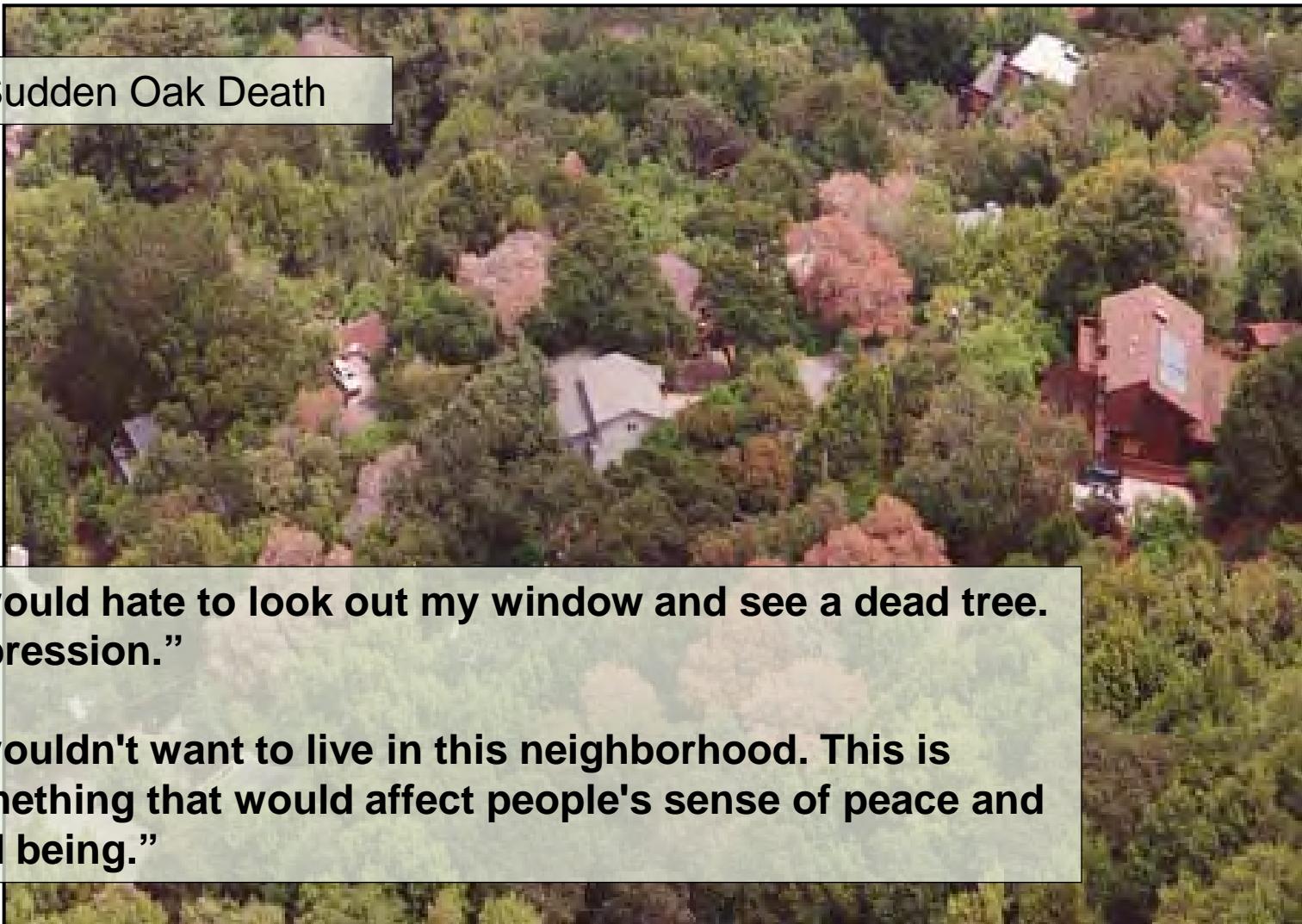


Average Score on 0-to-10 Concern Scale: **8.0**

Sudden Oak Death

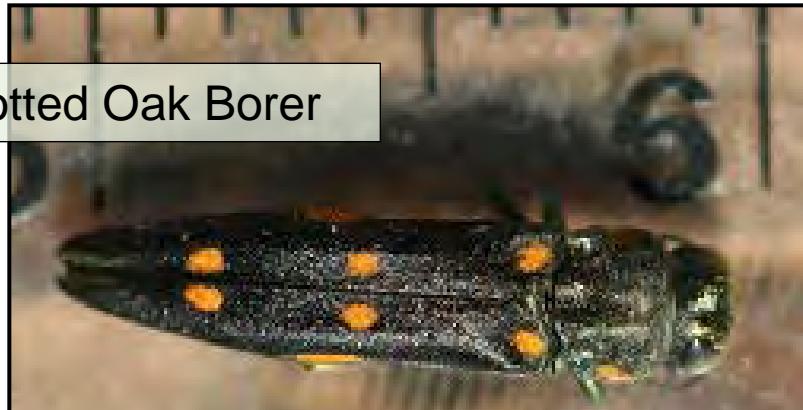
“I would hate to look out my window and see a dead tree. Depression.”

“I wouldn't want to live in this neighborhood. This is something that would affect people's sense of peace and well being.”



Average Score on 0-to-10 Concern Scale: 8.0

Goldspotted Oak Borer



“It’s pretty alarming that they can fly and they’re an inch long.”

“I just don’t like bugs; but if I seen something like that, that would scare the hell out of me, I’m sorry. It’s creepy, and it has wings.”

“It looks like a pretty hardy insect and could probably live a long time and do lots of damage to several trees.”

“If I’d see this bug I would’ve been like, ‘Oh, that’s pretty cool looking. This guy is black with dots on it, you know, a Morse code thing, that’s neat.’ Unless I was told, ‘Oh, that’s going to eradicate every single tree in your neighborhood,’ I wouldn’t have been afraid of it.”

Average Score on 0-to-10 Concern Scale: 7.7

Sudden Oak Death

“That's concerning and sad.”

“It looks like the tree is bleeding -- the fingers make it scarier and bring the viewer closer to the wound.”

UGA5044024

Average Score on 0-to-10 Concern Scale: **6.5**

Light Brown Apple Moth



“The apple moth in its development stage looks dangerous to the fruit material, plants and such.”

“This cutie doesn't worry me, even though I know it's an issue.”

5385 959

Conclusions

- **Voters continue to place great value on trees, spend time in close proximity to them, and see them as integral to their quality of life.**
- **Voters are increasingly aware and concerned about the threats that invasive insects and diseases pose to trees...**
- **...but they do not necessarily see a direct threat to their communities, and rank the issue as a low priority relative to other concerns.**
- **Voters express great willingness to modify their behavior and support policies to address the issue; the impact of the “Don’t Move Firewood” campaign shows how these behavioral changes can be made reality.**
- **Messages related to prevention, and to impacts on people – through quality of life and air and water quality – continue to stand out as most effective.**
- **Scientists, homeowners, and park rangers are credible messengers.**

For more information, contact:

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