



## Boat California Quagga & Zebra Mussel Prevention Quiz - Final Report

### OVERVIEW

Quagga and zebra mussels pose a serious threat to California's waters and fisheries. The spread of these freshwater mussels threatens recreational boating and fishing, aquatic ecosystems and fisheries, water delivery systems, hydroelectric facilities, agriculture and the environment in general. To help educate California boaters, the Boat California Quagga & Zebra Mussel Prevention Quiz was developed in 2018 as part of a pilot program to test boaters' current knowledge of quagga and zebra mussel prevention programs. The quiz contained six questions, promoted through a digital campaign targeting boaters around Lake Perris State Recreational Area, and if respondents completed the full quiz and provided their email and zip code, they were entered to be eligible to receive a life jacket.

### GOAL

The goal of this pilot program was to produce an efficient, cost-effective and measurable outreach framework for future grantees to replicate and deliver through their individual grants.

### BUDGET

Media Buy – \$27,500 for an 8-week targeted digital and social campaign

Agency Fees – \$10,000 for 4 months of campaign management, media planning, execution and reporting

Life Jacket Quiz Incentives – \$3,000 (note: the QZ Grant Program does not cover incentives)

Signage & Flyer Production – \$2,100

Survey Monkey Software – \$408 for 1-year usage

### MEDIA CAMPAIGN

The goal of the media campaign was to geographically target boaters ages 18-49 near Lake Perris through placements on social media, as well as digital ads in the form of native advertising. The campaign ran July 9, 2018 through September 2, 2018, and the majority of the budget was allocated to social media, with additional digital placements that scaled the campaign across the target geography. Digital ads were executed in the native format, which has been shown in industry studies to increase attention/recall and click through rates (CTR) over traditional banner ads. Native ads fit the form and function of each publisher site on which they appear, making them harder to ignore as they appear alongside relevant editorial content.

### Social

Ads appeared across both Facebook and Instagram, with the majority of the budget allocated to Facebook.

- Facebook/Instagram
  - Click to Website ads drove users to the QZ Quiz, utilizing the bulk of the budget in order to drive traffic to the quiz.
  - Post Engagement ads increased awareness and social engagement, and also included a link to the quiz.
  - All ads were targeted to reach the Lake Perris boating population, with relevant users identified via Facebook's Interest Targeting and historical engagement with DBW content on both Facebook and Instagram.

**Digital – Native Ads**

Two vendors were utilized to execute the native ad buy, to allow for optimization and diversity of placements.

- RTBiQ
  - Native ads were executed across contextually targeted placements to ensure relevancy of the message, reaching a customized boating audience through interest in boating, quagga and zebra mussel infestation prevention, Lake Perris, invasive species prevention and environmental protection.
  - Banner ads were deployed as added value to retarget users who saw or interacted with the native advertising, offering additional awareness and opportunity for engagement with the campaign.
- Quantcast
  - Native ads were executed across contextually targeted placements to ensure relevancy. The vendor will utilize audience targeting based on online search history as well as other behavioral patterns to reach users interested in boating, waterways, environmental protection, wildlife and Lake Perris.
  - Additional added value impressions were delivered in the native format to boost overall awareness and drive additional clicks.

| <u>Vendor</u>      | <u>Placement</u>                                       | <u>Flight Dates</u> | <u>Units</u> | <u>Net Cost</u>     |
|--------------------|--|---------------------|--------------|---------------------|
| <b>Social</b>      |  |                     |              |                     |
| Facebook           | Clicks to Website                                      | 7/9/2018-9/2/2018   | 900,000      | \$ 9,000.00         |
|                    | Post Engagement  |                     | 100,000      | \$ 1,000.00         |
| Instagram          | Clicks to Website                                      | 7/9/2018-9/2/2018   | 300,000      | \$ 3,000.00         |
|                    | Post Engagement  | 7/9/2018-9/2/2018   | 130,000      | \$ 1,300.00         |
| <b>Native</b>      |  |                     |              |                     |
| RTBiQ              | Behavioral/Contextual Targeting - native ads           | 7/9/2018-9/2/2018   | 795,769      | \$ 10,345.00        |
|                    | Added Value display retargeting ads - standard banners | 7/9/2018-9/2/2018   | 1,000,000    | \$ -                |
| Quantcast          | Behavioral/Contextual Targeting - native ads           | 7/9/2018-9/2/2018   | 331,875      | \$ 2,655.00         |
|                    | Added Value native ads                                 | 7/9/2018-9/2/2018   | 34,265       | \$ -                |
| Subtotal           |  |                     |              | \$ 27,300.00        |
| DFA Serving Fees   |  |                     |              | \$ 200.00           |
| <b>Grand Total</b> |  |                     |              | <b>\$ 27,500.00</b> |

## ONSITE OUTREACH

Since this limited pilot program was targeted to one waterbody, Lake Perris, onsite outreach was also included in the campaign. QZ Quiz posters and A-frame signs were developed and posted throughout Lake Perris boat inspection checkpoints, and every boater also received a flyer with information on taking the QZ Quiz.



## RESULTS

### **Quiz**

The QZ Quiz received 4,154 responses in the initial pilot run of the program.

- 2,622 people that took the full quiz passed with a score of 5 or better (out of 7)
- 757 people that took the full quiz failed, with a score of 4 or lower (out of 7)
- 775 people did not complete the full quiz (incompletes)

### **Media**

Digital Traffic to the QZ Quiz (from digital and social ads) totaled:

- 5 million impressions (including 2 million impressions from added value banners)
- 53,797 clicks to the quiz

## FOLLOW-UP SURVEY

Since the QZ Quiz was a limited pilot project, DBW wanted to know what respondents learned from the quiz to determine if it would be used throughout California. Those respondents that

provided their email address were sent a short follow-up survey to provide us with their feedback. Of the 2,022 QZ Quiz respondents who provided email addresses, 354 replied to the follow-up survey. Over 81% of respondents felt the quiz was very informative and they learned a lot about quagga and zebra mussels. While many boaters at Lake Perris already knew about the boat inspections, respondents learned more about quagga zebra mussel prevention through the QZ Quiz and how important it is to be vigilant. And 40% of those that weren't previously cleaning, draining and drying their boats stated they will now do so after learning more about mussel prevention from the QZ Quiz.

Below are selected comments from survey respondents:

**What did you learn from the QZ Quiz?**

*"I learned that the Quagga mussels are far more pervasive than I imagined, and ALL boaters must take prevention of spreading quagga very seriously."*

*"It's up to us boaters to prevent the spread of quagga and zebra mussels."*

*"That it is a problem and public knowledge is important"*

*"I believe more pictures should have been incorporated with defined markings"*

*"I don't have a boat but I've learned about the quagga and zebra mussels from newsreels"*

*"It's very, very informative for those who are not aware of the problems"*

**Do you think your boating inspection and cleaning practices have changed since taking the QZ Quiz?**

*"I learned WHY it's important to keep your vessels clean, drain and dry."*

*"I do not own a boat, yet but I'm looking for one. I took the quiz because I wanted to educate myself to be a better boat owner and to not cross-contaminate our waters."*

*"Between boats right now. But I will be more thorough."*

*"I do not own a boat, but had conversations about this with those I boat with."*

*"Actually I don't have a boat, but I enjoyed the learning experience."*

*"Don't own a boat but I work for the San Bernardino Dept of Agriculture/Weights & Measures, and I was curious what the quiz had to say."*

**RECOMMENDATIONS FOR FUTURE CAMPAIGNS**

Overall, the QZ Quiz was very successful, both from a media and quiz feedback perspective. All elements worked together to create that success, so a QZ grantee that wants to replicate the program should utilize all elements of the campaign: onsite signage and flyers paired with a targeted digital and social media buy, all leading to an online quiz with an incentive. The incentive is key to eliciting participation, so that component should be included in whatever form allowed by the grant.

Many boaters at Lake Perris already knew about "Clean Drain Dry" and the boat inspections, so that may have lead to higher awareness of the prevention programs in the quiz. If it is known that boaters at a grantee's waterbody have less awareness of quagga and zebra mussel prevention programs, such as "Clean Drain Dry," there may need to be a larger element of

education within the outreach campaign, possibly with prevention information included on the flyer given out to boaters onsite and in social and digital ads used to direct boaters to the quiz.

For more information about this pilot project, please contact [marketing@parks.ca.gov](mailto:marketing@parks.ca.gov) or [QZGrant@parks.ca.gov](mailto:QZGrant@parks.ca.gov).

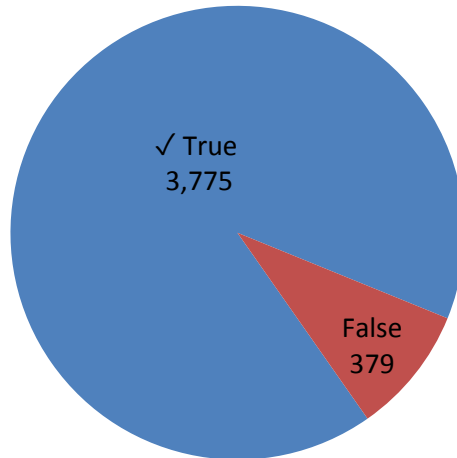
## QZ QUIZ SUMMARY RESULTS

| QZ QUIZ – 2018 RESULTS |  | Passed<br>(2,622 total) |             | Failed<br>(757 total) |             | TOTALS<br>(3,379 total) |             |
|------------------------|--|-------------------------|-------------|-----------------------|-------------|-------------------------|-------------|
|                        |  | # Correct               | # Incorrect | # Correct             | # Incorrect | % Correct               | % Incorrect |
| Q1                     | True or False: "Clean, Drain and Dry" means you check your boat to ensure there are no mussels, mud or plants on your boat and no water in the bilge, ballasts or engine before you leave the launch area after boating.                           | 2,488                   | 134         | 605                   | 152         | 92%                     | 8%          |
| Q2                     | These mussels are highly destructive in our waterways because they can:  | 2,515                   | 107         | 515                   | 242         | 90%                     | 10%         |
| Q3                     | True or False: Quagga and zebra mussels pose serious risks and costs to you as a boat owner because they can: block your boat's engine and cause overheating, increase drag on the bottom of your boat, and/or jam your boat's steering equipment. | 2,535                   | 87          | 578                   | 179         | 92%                     | 8%          |
| Q4                     | You should check your boat, engine and trailer for quagga and zebra mussels:   | 2,508                   | 114         | 509                   | 248         | 89%                     | 11%         |
| Q5                     | Out of water, quagga and zebra mussels can survive:  | 916                     | 1,706       | 88                    | 669         | 30%                     | 70%         |
| Q6                     | How should you clean, drain and dry your boat and trailer?   | 2,042                   | 580         | 199                   | 558         | 66%                     | 34%         |
| Q7                     | If you find quagga or zebra mussels on your boat you should:   | 2,039                   | 583         | 250                   | 507         | 68%                     | 32%         |

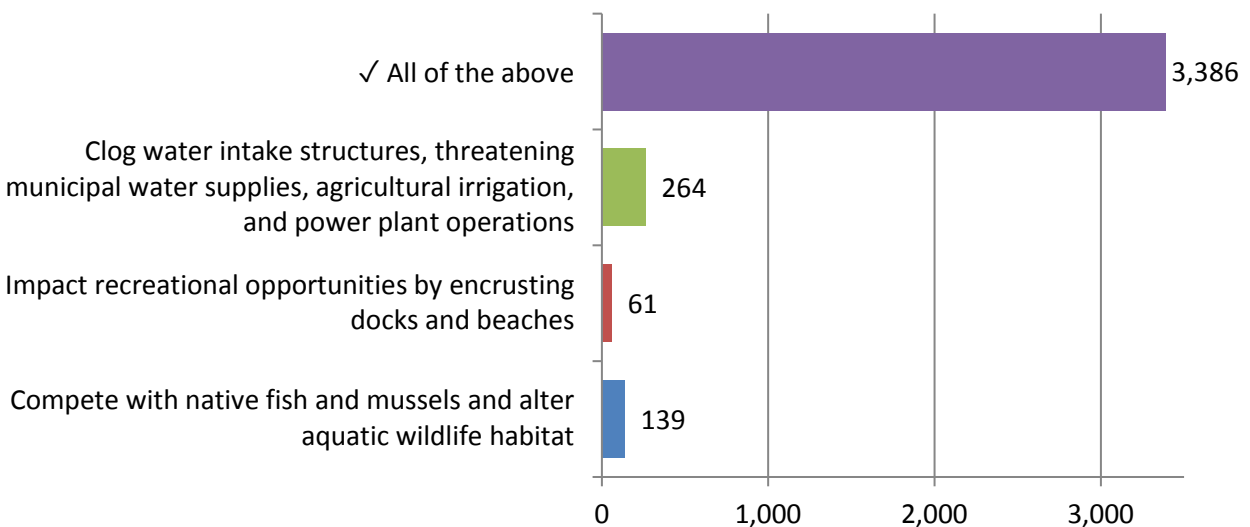
| QZ QUIZ – 2018 RESULTS |  | Incompletes (775 total) |              |            |
|------------------------|--|-------------------------|--------------|------------|
|                        |  | # Answered              | # Unanswered | % Answered |
| Q1                     | True or False: "Clean, Drain and Dry" means you check your boat to ensure there are no mussels, mud or plants on your boat and no water in the bilge, ballasts or engine before you leave the launch area after boating.                           | 775                     | 0            | 100%       |
| Q2                     | These mussels are highly destructive in our waterways because they can:  | 472                     | 303          | 61%        |
| Q3                     | True or False: Quagga and zebra mussels pose serious risks and costs to you as a boat owner because they can: block your boat's engine and cause overheating, increase drag on the bottom of your boat, and/or jam your boat's steering equipment. | 324                     | 451          | 42%        |
| Q4                     | You should check your boat, engine and trailer for quagga and zebra mussels:   | 224                     | 551          | 29%        |
| Q5                     | Out of water, quagga and zebra mussels can survive:  | 156                     | 619          | 20%        |
| Q6                     | How should you clean, drain and dry your boat and trailer?   | 62                      | 713          | 8%         |
| Q7                     | If you find quagga or zebra mussels on your boat you should:   | 17                      | 758          | 2%         |

## QZ QUIZ DETAILED QUESTION RESULTS

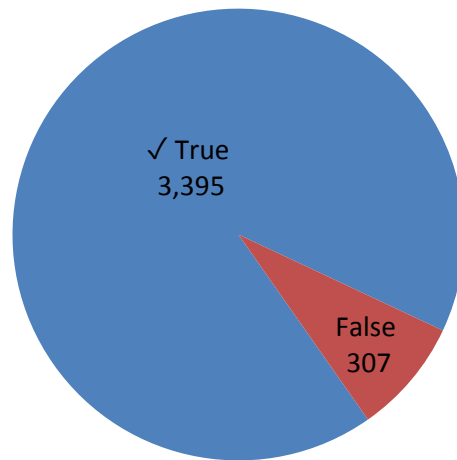
**Q1: True or False: “Clean, Drain and Dry” means you check your boat to ensure there are no mussels, mud or plants on your boat and no water in the bilge, ballasts or engine before you leave the launch area after boating.**



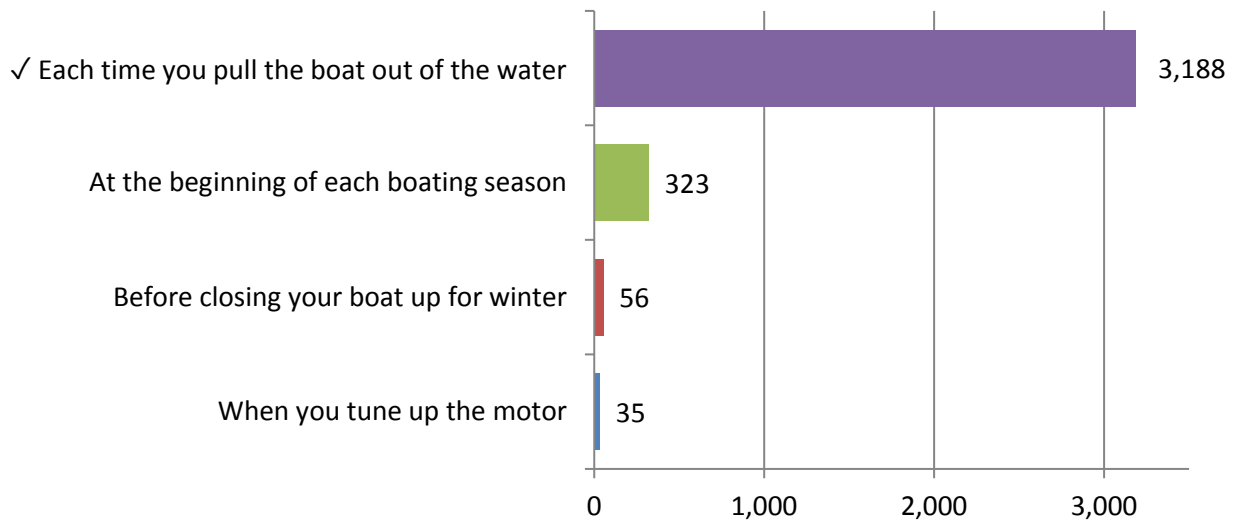
**Q2: These mussels are highly destructive in our waterways because they can:**



**Q3: True or False: Quagga and zebra mussels pose serious risks and costs to you as a boat owner because they can: block your boat's engine and cause overheating, increase drag on the bottom of your boat, and/or jam your boat's steering equipment.**

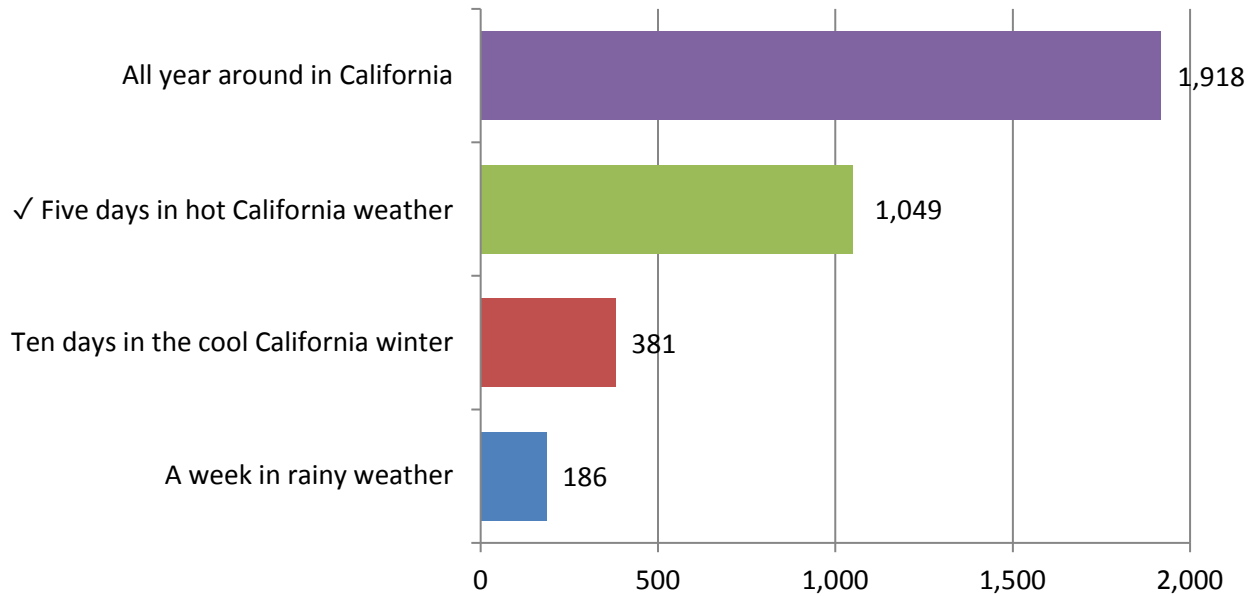


**Q4: You should check your boat, engine and trailer for quagga and zebra mussels:**

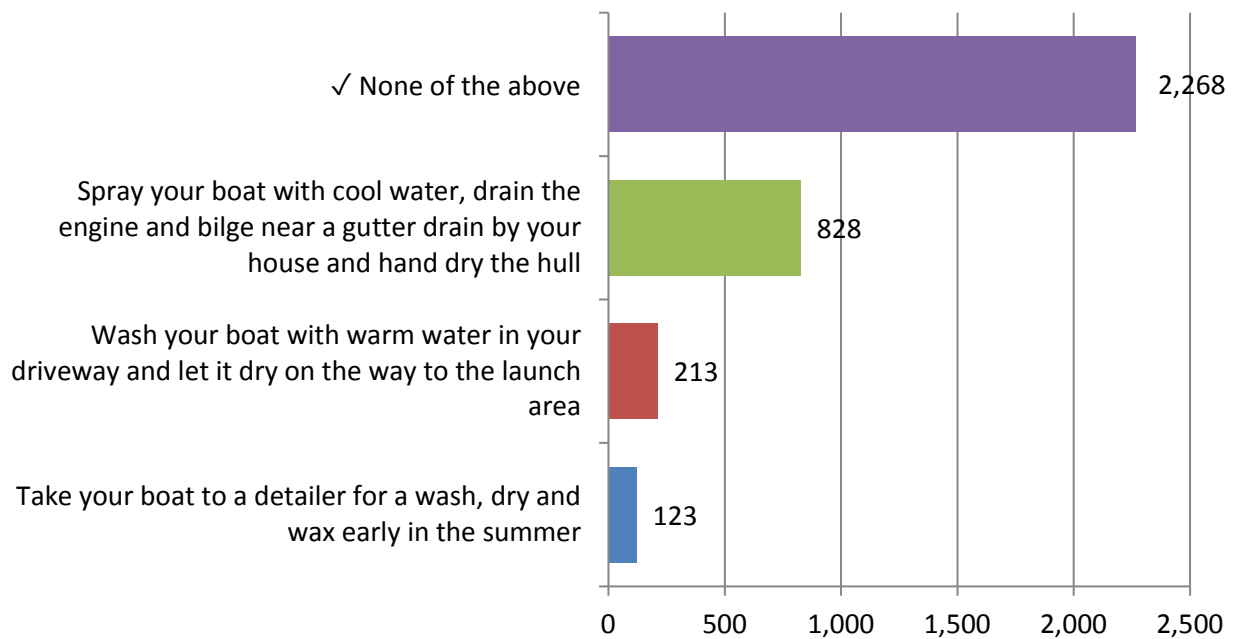




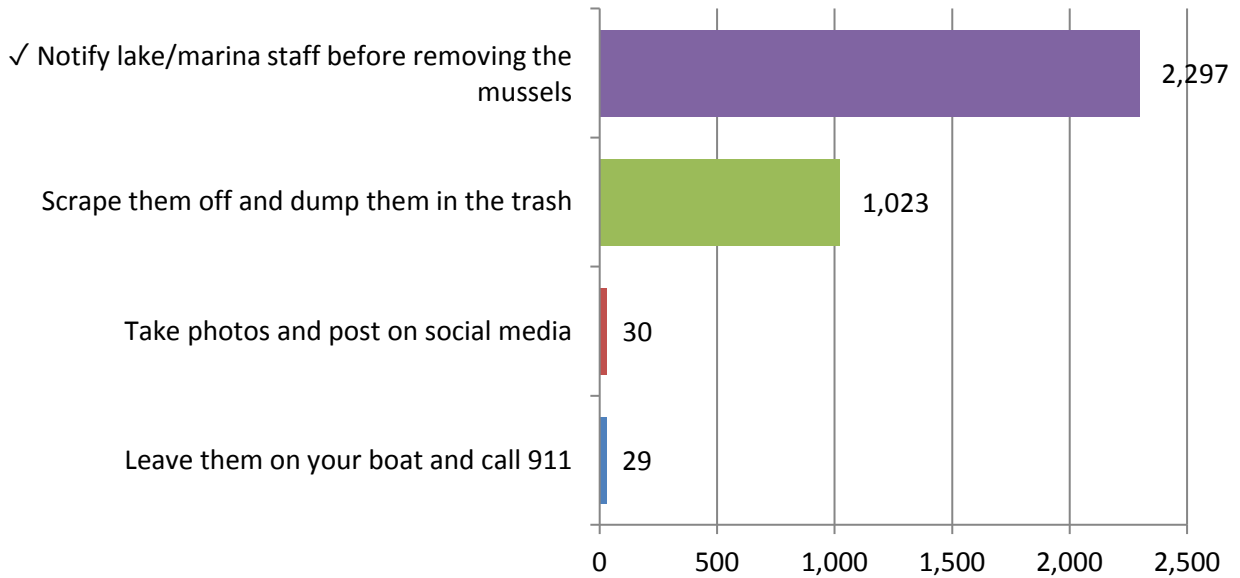
### Q5: Out of water, quagga and zebra mussels can survive...



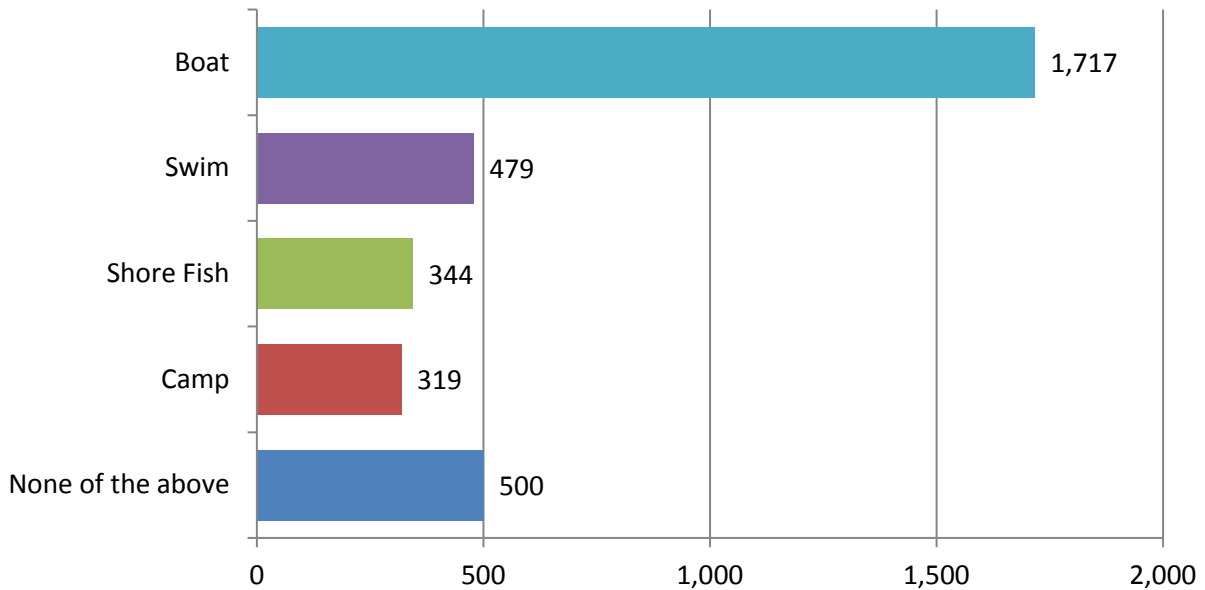
### Q6: How should you clean, drain and dry your boat and trailer?



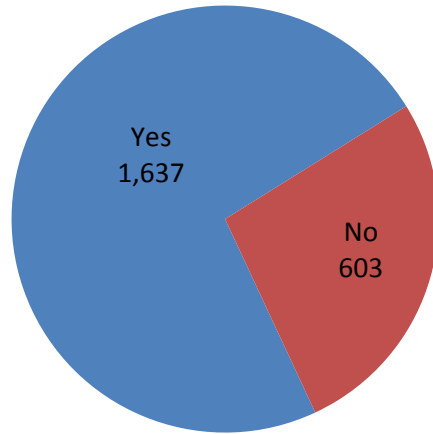
### Q7: If you find quagga or zebra mussels on your boat you should



### Q8: What type of Lake Perris recreation do you do most?

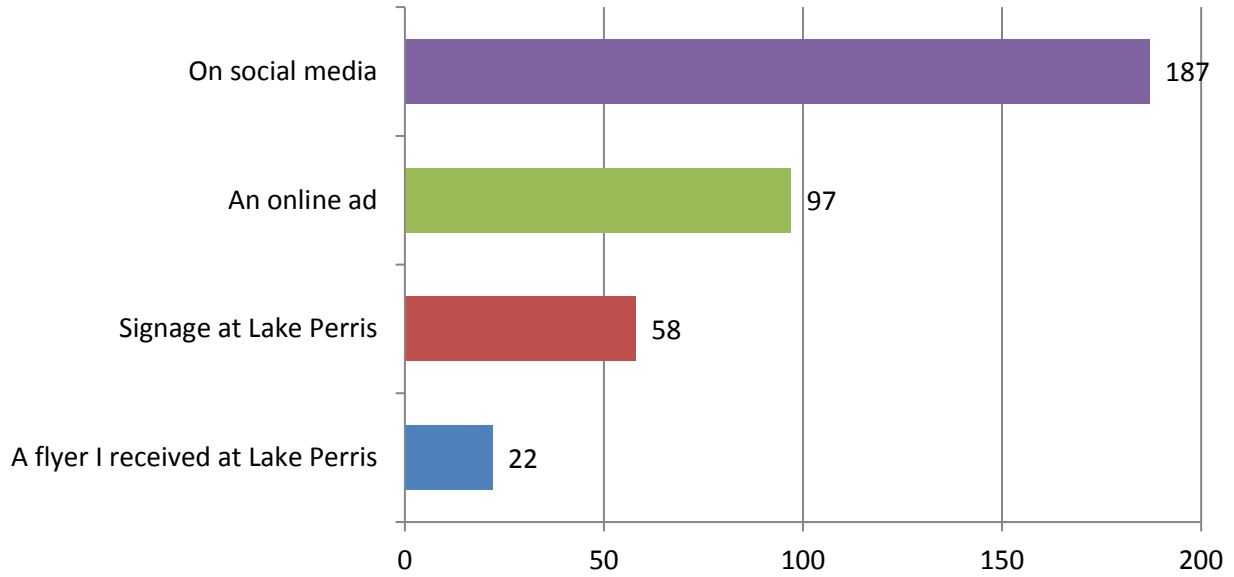


**Q9: Do you plan to use Lake Perris for boating in the future?**

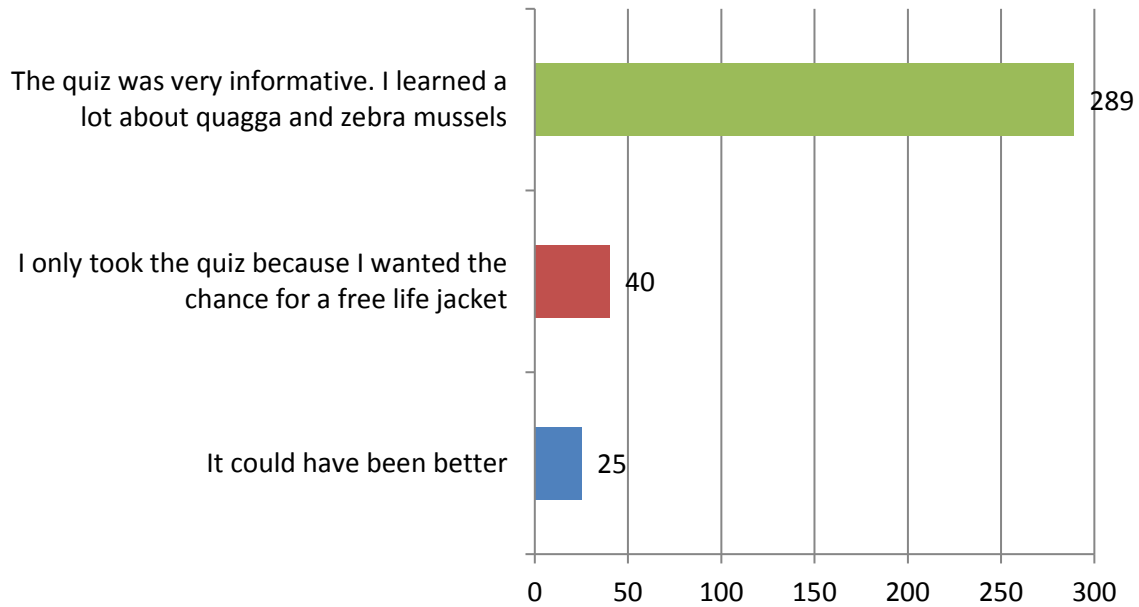


**FOLLOW-UP SURVEY DETAILED QUESTION RESULTS**

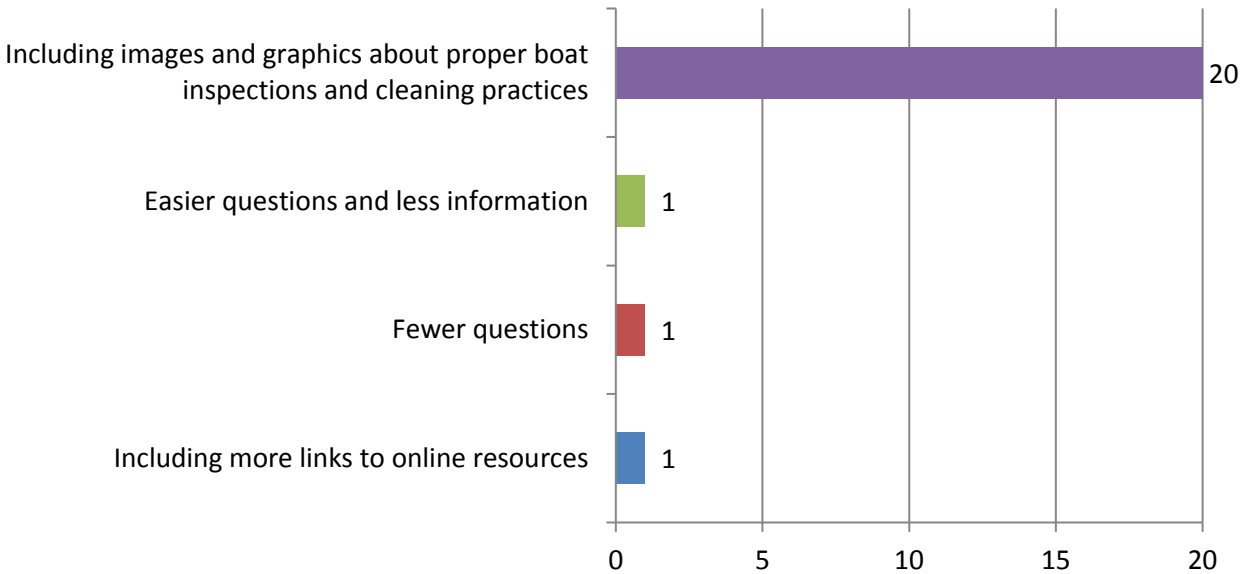
**Q1: How did you learn about the Boat California Quagga and Zebra Mussel Prevention Quiz (QZ Quiz)?**



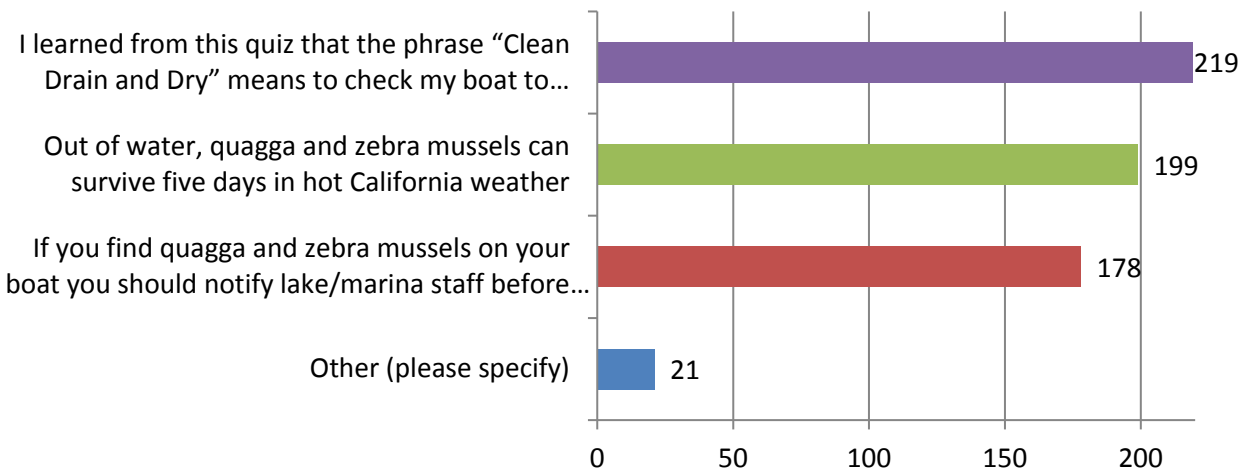
**Q2: What did you think about the QZ Quiz?**



**Q3: The QZ Quiz could have been made better by: (only asked to those who answered "It could have been better" in Q2)**



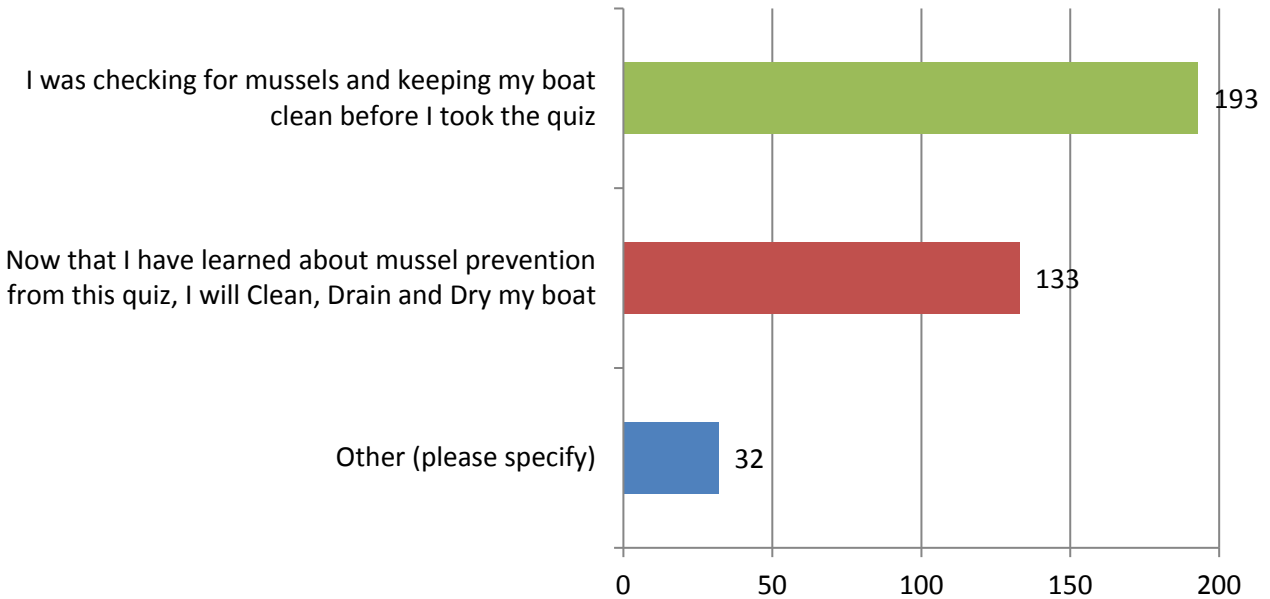
**Q4: What did you learn from the QZ Quiz? Select all that apply.**



Selected "Other" replies:

- "I learned that the Quagga mussels are far more pervasive than I imagined, and ALL boaters must take prevention of spreading quagga very seriously."
- "It's up to us boaters to prevent the spread of quagga and zebra mussels."
- "That it is a problem and public knowledge is important"
- "I believe more picture should have been Incorporated with defined markings"
- "I don't have a boat but I've learned about the quagga and zebra mussels from newsreels"
- "It's very, very informative for those who are not aware of the problems"

**Q5: Do you think your boating inspection and cleaning practices have changed since taking the QZ Quiz?**



Selected "Other" replies:

- "I learned WHY it's important to keep your vessels clean, drain and dry."
- "I do not own a boat, yet but I'm looking for one. I took the quiz because I wanted to educate myself to be a better boat owner and to not cross-contaminate our waters."
- "Between boats right now. But I will be more thorough."
- "I do not own a boat, but had conversations about this with those I boat with"
- "Actually I don't have a boat, but I enjoyed the learning experience."
- "Don't own a boat but I work for the San Bernardino Dept of Agriculture/Weights & Measures and I was curious what the quiz had to say."

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