How should the recreational red snapper fishery be managed? IRB201901429

This survey is designed to find out how recreational anglers would prefer the red snapper population in the Gulf of Mexico to be managed. The study is being conducted by economists and researchers at the . The results of this survey will be shared with recreational anglers and will be used to generate fishery management recommendations.

This survey will take <u>approximately 15 minutes to complete</u>. Your identity and all data you provide will be kept confidential to extent provided by the law.

Your participation in this study is completely voluntary. There is no penalty for not participating and you have the right to withdraw from the study at any time without penalty. Only the researchers will have access to the information we collect online. There is a minimal risk that security of any online data may be breached, but since no identifying information will be collected, and the online host (Qualtrics) uses several forms of encryption and other protections, it is unlikely that a security breach of the online data will result in any adverse consequence for you.

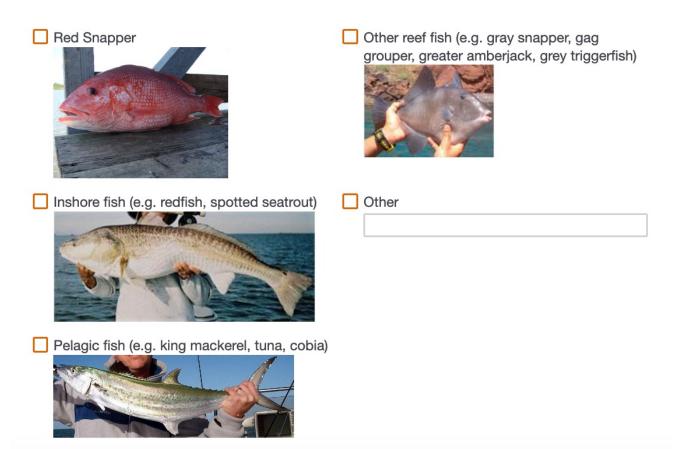
If you have any questions about your rights as a research participant in this study, please contact the IRB02 Office: email or telephone .

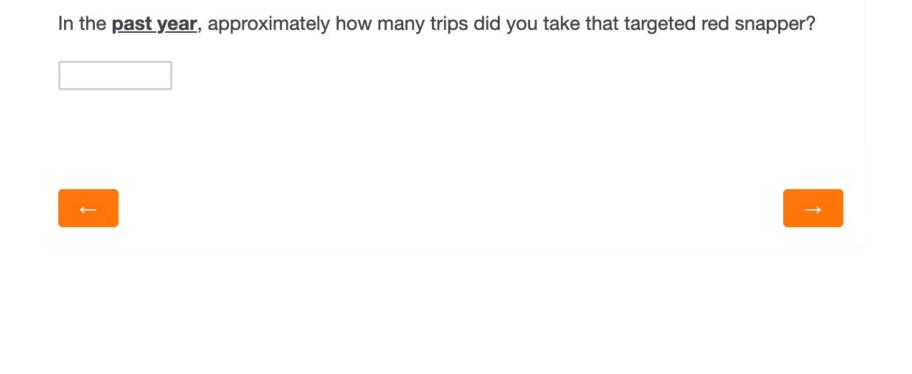
If you are willing to participate in this survey **AND** are over the age of 18, please click the arrow below.

Your Experience as a Red Snapper Fisherman

Before asking you how you would prefer the red snapper fishery to be managed, we would like to know more about how you fish. This information will help us understand how much it costs you to fish for red snapper. We are also interested in what changes you have seen in the size and number of fish in the Gulf of Mexico.

In the past 24 months, what have you fished for in the Gulf of Mexico?





| Approximately how ma | ny red snapper did you <u>ca</u> | atch in the last 12 months? |
|----------------------|----------------------------------|------------------------------|
| | | |
| | | |
| Approximately how ma | ny red snapper did you <u>re</u> | lease in the last 12 months? |
| | | |
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Taking into account both the fish you released and kept, what was the average size of the red snapper that you caught in the last 12 months?

Total length (inches)

What was the weight of the largest red snapper you caught in the **past 12 months**?

lb(s)

When you fish for red snapper, do you usually launch from areas on the Florida Panhandle (such as Destin or Pensacola)?



- O Yes
- O No

On average, how far offshore do you travel to **start** fishing for red snapper? O 10 miles or less 11 to 20 miles O 21 to 30 miles Over 30 miles On an average red snapper trip, what is the total distance you travel on the water? 15 0 30 45 60 75 90 105 120 135 150 Distance (miles) Approximately how many **hours per trip** did you spend **on the water** when you fish for red snapper? hours per trip

Do you use a private vessel (owned by yourself, a friend, a family member, etc.) when you fish for red snapper?







Approximately what size is the boat (in feet)?

0 ft

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Approximately what size engine does the boat have (horsepower)?

☐ hp

☐ hp

Approximately how many miles does the boat get for each gallon of fuel?

O miles

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Do you use for-hire vessels (charter, head, or party boats) to fish for red snapper?

Yes
No

On average, how much do you pay per trip on a for-hire vessel?

0 Dollars

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Different Options for Managing the Red Snapper Fishery

<u>Size limit</u>: Currently, fishermen may only legally keep red snapper that are <u>16 inches or larger</u>. Two alternatives are:

- 1. Fishermen may only keep red snapper that are <u>between 14 and 24 inches</u> in size and that are caught during the recreational fishing season; or
- 2. Fishermen could keep any size of red snapper, but they may only harvest 10 red snapper each year. This is known as a harvest tag. There is no bag limit. There is no closed season. Each red snapper that the fisherman chooses to keep is tagged with one of their allotted 10 harvest tags. Once the tag has been used it cannot be used again that year. The harvest tag system would mean red snapper anglers could harvest red snapper of any size, whenever they want, but would limit the total number of red snapper they harvest each year.

What is your <u>level of support</u> for these alternative size limits on red snapper that may be legally harvested?

| | Strongly oppose | Oppose | Neutral | Support | Strongly support |
|--|-----------------|--------|---------|---------|------------------|
| Status quo: 16" minimum | 0 | 0 | 0 | 0 | 0 |
| 14"-24" harvest size | 0 | 0 | 0 | 0 | 0 |
| Harvest tag: NO size limit; maximum of 10 fish per year | 0 | 0 | 0 | 0 | 0 |

<u>Bag limit</u>: Currently, fishermen may only legally keep 2 red snapper per person per trip. Three alternatives are:

- 1. Fishermen may keep <u>1 red snapper per person per trip</u> but the season length will <u>increase</u>;
- 2. Fishermen may keep <u>4 red snapper per person per trip</u> but the season length will be <u>shortened</u>; or
- 3. Fishermen are allocated 10 harvest tags per year (no size limit, no bag limit, and no closed season).

What is your **level of support** for these alternative bag limits for red snapper?

| | Strongly oppose | Oppose | Neutral | Support | Strongly support |
|---|-----------------|--------|---------|---------|------------------|
| Status quo: 2 snapper/person/trip; fishing season remains unchanged | 0 | 0 | 0 | 0 | 0 |
| 1 snapper/person/trip; longer fishing season | 0 | 0 | 0 | 0 | 0 |
| 4 snapper/person/trip; shorter fishing season | 0 | 0 | 0 | 0 | 0 |
| Harvest tag: no bag limit; maximum of 10 fish per year | 0 | 0 | 0 | 0 | 0 |

<u>Season length</u>: Currently, private fishermen may only legally harvest red snapper during the recreational season (approximately 25 days per year). This season length does not apply to head/party boats. Three alternatives are:

- 1. Fishermen may legally harvest red snapper for <u>15 days per year</u>, but the bag limit would be <u>increased</u>;
- 2. Fishermen may legally harvest red snapper for <u>40 days per year</u>, but the bag limit would be <u>decreased</u>; or
- 3. Fishermen are allocated 10 harvest tags per year (no size limit, no bag limit, and no closed season).

What is your <u>level of support</u> for these alternative recreational season lengths for red snapper?

| | Strongly oppose | Oppose | Neutral | Support | Strongly support |
|--|-----------------|--------|---------|---------|------------------|
| Status quo: 25 day season | 0 | 0 | 0 | 0 | 0 |
| 15 day season; higher bag limit | 0 | 0 | 0 | 0 | 0 |
| 40 day season; lower bag limit | 0 | 0 | 0 | 0 | 0 |
| Harvest tag: no season; maximum of 10 fish per year | 0 | 0 | 0 | 0 | 0 |

Management of the Recreational Red Snapper Fishery

The following questions will present 3 different alternative approaches to managing the recreational red snapper fishery. Each alternative will vary according to:

- Size limit
- · Bag limit
- · Season length
- The distance from shore you should expect to travel before you would catch a red snapper that is at least 14 inches

You will be asked to choose your preferred management approach. If you would prefer not to fish for red snapper under any of the management alternatives then you have the option to state that you would not fish for red snapper.

Below is an EXAMPLE that shows how someone might answer this question:

Status Quo Management versus a Harvest Tag

The following questions will present 3 different alternative approaches to managing the recreational red snapper fishery. Each alternative will vary according to:

- Management approach (status quo versus harvest tag)
- The average size of red snapper that you are expected to catch
- Your expected catch rate
- The distance from shore you should expect to travel before you would catch a red snapper that is at least 14 inches

Status quo management includes size, bag and season limits for the red snapper fishery. The harvest tag option allows fishermen to fish all year long, but their take-home catch would be restricted to 10 fish.

You will be asked to choose your preferred management approach. If you would prefer not to fish for red snapper under any of the management alternatives then you have the option to state that you would not fish for red snapper.

Below is an EXAMPLE that shows how someone might answer this question:

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|---------------|---------------|---------------|
| Size limit | 14-24" slot | 16" minimum | 16" minimum |
| Bag limit | 1 fish | 4 fish | 4 fish |
| Season length | 30 days | 30 days | 15 days |
| Distance from shore | 50 miles | 30 miles | 40 miles |

Alternative 1

O Alternative 2

Alternative 3

I would not choose to fish for red snapper

The angler who answered this question preferred <u>Alternative 1</u>, which would result in <u>traveling 50 miles from shore</u> to catch red snapper. The <u>bag limit is 1 red snapper</u> per angler. The angler can keep any red snapper between <u>14 to 24 inches</u> long during the <u>30 day season</u>.

Under the management alternative you selected, how would the number of trips where you target red snapper change?

Increase

Stay the same

Decrease

The angler would <u>increase</u> the number of trips he or she takes to catch red snapper under management <u>Alternative 1</u> (which the angler selected above).

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|---------------|-----------------|-----------------|
| Management approach | Harvest tag | Harvest tag | Status quo |
| Average catch size | 18" | 18" | 14" |
| Catchrate | 1 per boat | 4 per fisherman | 1 per fisherman |
| Distance from shore | 30 miles | 40 miles | 30 miles |

Which management option would you prefer

Alternative 1

Alternative 2

O Alternative 3

I would not choose to fish for red snapper

The angler who answered this question preferred <u>Alternative 2</u> (harvest tag management), which would result in <u>traveling 40</u> <u>miles from shore</u> to catch red snapper. The average catch rate under this management alternative is <u>4 red snapper</u> per angler in the boat. The <u>average size</u> of the red snapper caught per trip is <u>18 inches</u>.

Under the management alternative you selected, how would the number of trips where you target red snapper change?

Increas

Stay the same

Decrease

The angler would <u>increase</u> the number of trips he or she takes to catch red snapper under management <u>Alternative 2</u> (which the angler selected above).

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|---------------|---------------|---------------|
| Size limit | 14-24" slot | 16" minimum | 16" minimum |
| Bag limit | 2 fish | 2 fish | 4 fish |
| Season length | 45 days | 45 days | 15 days |
| Distance from shore | 50 miles | 50 miles | 40 miles |

- O Alternative 1
- O Alternative 2
- Alternative 3
- O I would not choose to fish for red snapper

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|-----------------|-----------------|---------------|
| Management approach | Harvest tag | Harvest tag | Status quo |
| Average catch size | 18" | 18" | 26" |
| Catchrate | 4 per fisherman | 4 per fisherman | 1 per boat |
| Distance from shore | 50 miles | 30 miles | 50 miles |

Which management option would you prefer?

- O Alternative 1
- O Alternative 2
- Alternative 3
- O I would not choose to fish for red snapper

| Under the management alternative you selected, how would the number of trips where you target red snapper change? | Under the management alternative you selected, how would the number of trips where you target red snapper change? |
|---|---|
| IncreaseStay the sameDecrease | IncreaseStay the sameDecrease |
| ← | ← |
| | |
| | |

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|---------------|---------------|---------------|
| Size limit | 14-24" slot | 16" minimum | 14-24" slot |
| Bag limit | 4 fish | 1 fish | 4 fish |
| Season length | 45 days | 30 days | 30 days |
| Distance from shore | 50 miles | 40 miles | 40 miles |

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|-----------------|-----------------|-----------------|
| Management approach | Status quo | Harvest tag | Harvest tag |
| Average catch size | 26" | 22" | 22" |
| Catchrate | 1 per fisherman | 2 per fisherman | 1 per fisherman |
| Distance from shore | 40 miles | 30 miles | 50 miles |

- O Alternative 1
- O Alternative 2
- O Alternative 3
- I would not choose to fish for red snapper

Which management option would you prefer?

- O Alternative 1
- O Alternative 2
- O Alternative 3
- I would not choose to fish for red snapper

| ☐ I do not like any of the management option | s |
|--|------------------------------|
| ☐ I do not trust how the government is manage | ging the red snapper fishery |
| ☐ I object to government management of the | red snapper fishery |
| ☐ I prefer to fish for other types of fish | |
| ☐ I do not anticipate fishing for red snapper in | n the future |
| Other (please explain): | |
| | |

Why would you not choose to fish for red snapper? (Select all that apply)

| Why would you not choose to fish for red snapper? (Select all that apply) |
|---|
| I do not like any of the management options |
| ☐ I do not trust how the government is managing the red snapper fishery |
| ☐ I object to government management of the red snapper fishery |
| ☐ I prefer to fish for other types of fish |
| ☐ I do not anticipate fishing for red snapper in the future |
| Other (please explain): |
| |

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|---------------|---------------|---------------|
| Size limit | 14-24" slot | 16" minimum | 14-24" slot |
| Bag limit | 4 fish | 1 fish | 4 fish |
| Season length | 45 days | 30 days | 30 days |
| Distance from shore | 50 miles | 40 miles | 40 miles |

| () | Alternative |
|-----|-------------|
| | Alternative |
| | |

O Alternative 2

O Alternative 3

O I would not choose to fish for red snapper

| | Alternative 1 | Alternative 2 | Alternative 3 |
|---------------------|---------------|---------------|-----------------|
| Management approach | Status quo | Harvest tag | Status quo |
| Average catch size | 26" | 14" | 14" |
| Catch rate | 1 per boat | 1 per boat | 2 per fisherman |
| Distance from shore | 30 miles | 40 miles | 40 miles |

Which management option would you prefer?

O Alternative 1

O Alternative 2

O Alternative 3

O I would not choose to fish for red snapper

| How confident are you that your responses to these survey questions accurately reflect |
|--|
| how you would fish under different management alternatives? |
| |
| O Not at all |
| O Slightly |
| O Moderately |
| O Very |
| O Extremely |
| |
| |
| |
| |

How confident are you that your responses to these survey questions accurately reflect how you would fish under different management alternatives?

- O Not at all
- Slightly
- Moderately
- O Very
- Extremely

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What is your sex?

O Male

O Female

O Prefer not to answer

What is your age?

- O 18-24 years
- O 25-34 years
- O 35-44 years
- O 45-54 years
- O 55-64 years
- O 65-74 years
- O 75 years or over

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Please indicate your household income for 2018 (before taxes):

- O Less than \$25,000
- **O** \$25,000 \$49,999
- **O** \$50,000 \$99,999
- O \$100,000 \$199,999
- \$200,000 or more
- O Prefer not to say

4

Please select your county of residence



| Thank you for your time. Please enter any comments or information you would like to share in the text box below: | 0 |
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