RETURN 'EM RIGHT Measuring Behavior Change through Angler Surveys



RETURN'EM RIGHT

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RETURN 'EM RIGHT Earn Another Fight

Barotrauma

As fish are reeled up from deep water, **gases in the body cavity** and internal organs expands, often displacing the organs and leaving the **fish severely bloated.**



Goals

- **Reduce mortality** from barotrauma and release of reef fish
- Improve angler experiences with release gear

We provide the training and gear to anglers in the Gulf of Mexico to improve the survival of reef fish and benefit the health of the fishery



RETURN 'EM RIGHT

Angling Community

Reef Fishing Anglers

Who are they?

What do they **know** about Best Release Practices?

- Venting
- Fish descending devices

How are they releasing fish?

Attitudes & perceptions?

What are the **barriers** for adopting Best Release Practices?

- Knowledge
- Getting tools/devices
- Other anglers





Angling Community

Reef Fishing Anglers



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Angling Community Reef Fishing Anglers



Human Dimensions Survey (Southwick)

Behavior Help fish return to depth

Main components

- Knowledge
- Past experiences
- Perceived barriers
- Attitude
- Social norm influence of others
- Perceived control (skills, equipment)
- Behavioral intention



Gulf of Mexico



2024 Survey (n=3,413)





Angling Community

Reef Fishing Anglers



RER Device Follow-up Survey

| | 2 | |
|--|---------------|--|
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| | | |



How it works:



Marketing & Communication

- Social platforms
- Ambassadors
- In-person events
- Word of mouth

- Return 'Em Right Website
 - Unaffiliated
 - Own branding
 - Clear and concise

Training (~15 min)

- Clear and concise
- Mix of light text and short videos
- Scientific sources of information
- Interactive questions





Participant Analytics

- Record entries
- Training date
- Duration of training
- Shipping information
- Shipping date





Training survey

- Right after training
- Impression of training
 Detect any issues
- Detect any issues



Device Use Survey

- At least 6 months with devices
- Satisfaction with information and devices
- Device use
- Issues with devices/information
- Experiences with barotrauma

4.95 stars out of 5 n=21,833



Angling Community Reef Fishing Anglers RER Device Follow-up Survey



RIGHT EM

Training
▲ 42,565
CompletionsEligible
♣ 40,799
AnglersShipping
♣ 39,543
Completed

RER Participation through time

The Anglers...

RER Device Follow-up Survey



RETURN 'EM RIGHT

How often did you go reef fishing in the GOM?

| | | Contraction of the second s | | |
|---------------------|------|---|------|------|
| Options | 2022 | 2023 | 2022 | 2023 |
| Never | 200 | 212 | 14% | 17% |
| A few times | 570 | 576 | 39% | 47% |
| Once a month | 174 | 103 | 12% | 8% |
| A few times a month | 394 | 247 | 27% | 20% |
| Once a week | 77 | 35 | 5% | 3% |
| A few times a week | 56 | 37 | 4% | 3% |
| Daily | 9 | 6 | 1% | 0% |
| n | 1480 | 1216 | | |

Where did you go reef fishing in 2023?

| Options | | 2023 | 2023 |
|----------------|---|------|------|
| Atlantic Ocean | X | 182 | 86% |
| Pacific Ocean | | 16 | 8% |
| Other | | 8 | 4% |
| Caribbean Sea | | 5 | 2% |
| | n | 211 | |

The Anglers...

How often did you target the following fishing depths ranges: Most of the RER participants are using depths between 31-150 feet.

RER Device Follow-up Survey



Circles represent mean values. Dotted lines represent confidence intervals for mean. Y scale: 1=never, 2=rarely, 3=sometimes, 4=often, 5=always



Southwick survey: Although this question is using a different format (this is a select one option), the general pattern is alike with the responses from the RER surveys left graph). A greater number of Southwick survey respondents are using depth between 31-150 feet.



Anglers feedback on PACKAGE

RER Device Follow-up Survey

Overall anglers were extremely satisfied with the devices provided.

Were you satisfied with the PACKAGE containing free descending gear you received from Return 'Em Right?



| Options | Resp | onses | Percenta | |
|------------------------|------|-------|------------------|------------------|
| | 2022 | 2023 | 2022 | 2023 |
| Extremely dissatisfied | 8 | 8 | 0% | 0% |
| Somewhat dissatisfied | 7 | 1 | 0% | 0% |
| Neither | 29 | 29 | 2% | 2% |
| Somewhat satisfied | 86 | 69 | 5% | 4% |
| Extremely satisfied | 1584 | 1500 | <mark>92%</mark> | <mark>93%</mark> |
| Total | 1714 | 1607 | 1 | 1 |

Responses options were given on a 5-point scale (1=extremely dissatisfied to 5=extremely satisfied).

Anglers feedback on PACKAGE RER Device Follow-up Survey

| 2022 | 2023 | 2022 | 2023 |
|------|--|--|---|
| 3 | 3 | 0% | 0% |
| 1 | 2 | 0% | 0% |
| 32 | 32 | 2% | 2% |
| 135 | 106 | 8% | 7% |
| 1463 | 1399 | 90% | 91% |
| 1634 | 1542 | 1 | 1 |
| | | | |
| | 13/2/8 | | |
| 2022 | 2023 | 2022 | 2023 |
| 3 | 5 | 0% | 0% |
| 7 | 5 | 0% | 0% |
| 44 | 44 | 3% | 3% |
| 226 | 173 | 14% | 11% |
| 1354 | 1315 | 83% | 85% |
| 1634 | 1542 | 1 | 1 |
| | | | |
| | | | |
| 2022 | 2023 | 2022 | 2023 |
| 5 | 4 | 0% | 0% |
| 6 | 4 | 0% | 0% |
| 123 | 103 | 8% | 7% |
| 263 | 186 | 16% | 12% |
| 1237 | 1245 | 76% | 81% |
| 1634 | 1542 | 1 | 1 |
| | 3 1 32 135 1463 1634 2022 3 7 44 226 1354 1634 1634 1634 2022 5 6 123 263 1237 | 3312323213510614631399163415422022202335754444226173135413151634154220222023544415421034154220252023546412310326318612371245 | 3 3 0% 1 2 0% 32 32 2% 135 106 8% 1463 1399 90% 1634 1542 1 2022 2023 2022 3 5 0% 7 5 0% 44 44 3% 226 173 14% 1354 1315 83% 1634 1542 1 226 173 14% 1354 1315 83% 1634 1542 1 2022 2023 2022 5 4 0% 1634 1542 1 2022 2023 2022 5 4 0% 6 4 0% 123 103 8% 263 186 16% 1237 1245 76% |

Were you satisfied with the INFORMATION included in the package?



• Overall anglers were **extremely satisfied** with the information provided.

Responses options were given on a 5-point scale (1=extremely dissatisfied to 5=extremely satisfied).

Anglers feedback – Knowledge

RER Device Follow-up Survey

Overall, there is an increase of 10-15% for the participants' perception regarding their knowledge about what barotrauma is and between 15-22% for their knowledge about how to detect barotrauma. No major differences between

years.

What barotrauma is?

BEFORE participating in the Return 'Em Right program



How to detect barotrauma?

BEFORE participating in the Return 'Em Right program



AFTER participating in the Return 'Em Right program



RER Device Follow-up Survey

• Overall, participants are using more the SeaQualizer than the SeaYaLater device.



| Onavorada | how mony tring | have very used |
|-------------|----------------|----------------|
| On average, | now many trips | have you used: |

| Year | Mean | St. Dev | Max | n |
|-------------|------|---------|------------------|------|
| SEAQUALIZER | | | | |
| 2022 | 7 | 32 | 820 | 1582 |
| 2023 | 7 | 17 | 300 | 719 |
| SEAYALATER | | | $\sim 1 / 1 / 1$ | |
| 2022 | 3 | 8 | 200 | 1582 |
| 2023 | 2 | 6 | 75 | 720 |

RER Device Follow-up Survey

Regardless of the year, participants were using more venting tools before their training, but after the training and receiving their descending devices, they are using more descending and slightly more dehooking devices.



Circles represent mean values. Dotted lines represent the confidence intervals for mean.



Southwick survey:

Are you **AWARE** of the following reef fish handling protocols? Please check the box for each of the protocols you are familiar with (even if you don't use them).

| Item | 2021 | 2024 | Difference |
|---|------|-----------|------------------|
| Use venting method | 71% | 80% | <mark>9%</mark> |
| Use descending devices | 32% | 58% | <mark>26%</mark> |
| Use dehooking devices | 77% | 80% | 3% |
| Take efforts to minimize the handling of fish | 74% | 82% | <mark>8%</mark> |
| Use non-stainless steel circle hooks | 66% | 68% | 2% |
| Change locations | 47% | 62% | <mark>15%</mark> |
| Use rubberized landing nets | 36% | Not asked | Na |
| Cut the line | 55% | 54% | 1% |
| Hold the fish horizontally | 25% | 25% | 0% |
| Throw the fish up in the air | 4% | 4% | 0% |
| I'm not aware of options | 5% | 4% | -1% |
| n n | 3905 | 3413 | |

Southwick survey:

- When fishing for reef fish, how OFTEN do you ...
- *Displaying only the people who knew about the handling protocol
- In 2021, less respondents were using FDD (53%) than in 2024 (74%).
- In 2024, more respondents are changing locations if or when predators arrive (often/always category is 7% up)
- In 2024, more respondents are cutting the line when the fish is hooked too deeply (often/always category is 12% up)



2024



Never-Rarely Sometimes

Often-Always

RER Device Follow-up Survey:

How likely is it that you would buy a fish descending device if needed?

| | 2023-Y1 | 2023-Y2 | All | 2023-Y1 | 2023-Y2 | All |
|----------------------|---------|---------|------|---------|---------|------------------|
| Unlikely | 47 | 27 | 74 | 5% | 9% | 6% |
| Neither | 35 | 22 | 57 | 4% | 8% | 4% |
| Likely | 679 | 194 | 873 | 68% | 67% | 68% |
| I already bought FDD | 237 | 46 | 283 | 24% | 16% | <mark>22%</mark> |
| | 998 | 289 | 1287 | 1 | 1 | |

Southwick survey: Where did you get a descending device you use when reef fishing? Asked only of people who used an FDD at least some of the time.

| Where FDD was obtained | n | Percent |
|---|-------|------------------|
| I bought it online | 261 | 16% |
| I bought it at a tackle shop | 397 | 24% |
| I received it from the Return 'Em Right program | 545 | <mark>33%</mark> |
| It belonged to someone else | 292 | 18% |
| I don't remember | 141 | 9% |
| Total | 1,636 | |



Southwick survey:

Have you ever heard of, or received outreach information from the "Return 'Em Right" (RER) program?

| Options | 2021 | 2024 | Difference |
|---|------|--------------------|------------------|
| Yes, I heard about RER | 4% | 2 <mark>21%</mark> | <mark>17%</mark> |
| Yes, I received the FDD and information materials | Na | 11% | na |
| No, I haven't heard about RER | 87% | 56% | -31% |
| I am not sure if I heard about RER | 9% | 13% | 4% |

RER Device Follow-up Survey:

Since participating in the RER program, how many anglers have you talked to about using descending devices?

| Year | Mean | Max | St. Dev | n |
|------|------|-------------------|---------|------|
| 2022 | 11 | >300 (9 over 300) | 27.3 | 1505 |
| 2023 | 9 | >300 (1 over 300) | 23.8 | 975 |



Southwick survey: Where did you first hear about the "Return 'Em Right" program?

| Options | Southwick 2024 | RER module | Difference |
|------------------------|------------------|-------------------------------------|-----------------|
| From another angler | <mark>24%</mark> | en en la <mark>28%</mark> en la ser | <mark>4%</mark> |
| Other | 14% | 13% | 1% |
| Facebook | 13% | 13% | 0% |
| Other social media | <mark>12%</mark> | <mark>5%</mark> | <mark></mark> |
| Magazine/newspaper | 10% | 11% | 1% |
| YouTube | <mark>9%</mark> | <mark>17%</mark> | 8% |
| Search engine | 6% | 3% | 3% |
| In-person presentation | 5% | 3% | 2% |
| TV/Radio | 5% | 4% | 1% |
| Instagram | 2% | 2% | 0% |
| Twitter/X | 1% | 0% | 1% |

SOURCE

This information is based on the training question: Where did you find out about the Return 'Em Right Training?

LOUISIANA

40

44

38

0

78

22

143

149

189

200

8,410

4,429

3,993

3,826

3,741

1,739

1,207

Dashboard

SOURCE - ALL TIMEFRAMESourceCountFrom another anglerCountFacebookImage: Image: I

Other social media
TV/Radio

SOURCE - SELECTION

| Source | Count |
|---------------------|-------|
| From another angler | 8,410 |
| Facebook | 4,429 |
| Other | 3,993 |
| Magazine/newspaper | 3,826 |
| Youtube | 3,741 |
| Other social media | 1,739 |
| TV/Radio | 1,207 |
| FLORIDA | |







1k

525

445

400



ALABAMA





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RETURN 'EM RIGHT EDUCATION MODULE SURVEY

Rate your experience (overall)

| Scale: poor (0) to excellent (5) | | | | | | | |
|----------------------------------|------|------|------|---------|-----------|--|--|
| Field | Mean | Min | Max | St. Dev | Responses | | |
| Rate | 4.95 | 0.00 | 5.00 | 0.24 | 15589 | | |



Please rate your experience with...

Scale: poor (0) to excellent (5)

| Field | Mean | Min | Max | St. Dev. | Responses |
|--|------|------|------|----------|-----------|
| The training was easy to use | 4.90 | 0.00 | 5.00 | 0.32 | 14352 |
| The training was useful | 4.91 | 0.00 | 5.00 | 0.30 | 14352 |
| The information presented was clearly | 4.91 | 0.00 | 5.00 | 0.32 | 14352 |
| The information was presented in a creative way | 4.85 | 0.00 | 5.00 | 0.40 | 14352 |
| I liked the interactive experience of the training | 4.88 | 0.00 | 5.00 | 0.37 | 14352 |

Would you recommend this training to others?



Live survey reports



Participant Comments...



"Great program that really helps our fishing community"

Russ D., Florida

"A fantastic and free program that has significantly affected the way I catch and release fish." Chris A., Florida

"Great educational program which I have shared with every Groundfish head boat I fish upon!!!." Kenneth Y., New York

"A **fantastic program** top to bottom. I got 5 of my fellow boat owners to register, take the class and use the devices. **They work great**, and thanks to your team for providing this to us anglers. **It makes it easy** for us to do our part." Riley R., Florida

"Public education a lot of my friends **didn't know how to properly vent** a fish." Jeff S., Florida

Key points

- We are using two surveys targeting different levels (GOM reef anglers and RER participants)
- By including a mechanism (such as the surveys) from the planning phase, we can monitor progress at different phases of this program
- Near-real time tools (live survey reports, dashboards, etc.) allow for a better communication among the different components of the RER Program.



Acknowledgements



CORE PARTNERS





ORGANIZATIONAL PARTNERS











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AT TEXAS A&M UNIVERSITY



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