



FORWARD FACING SONAR 101
WITH
SEAN SABOL

First Thing First.....

- **I would like to thank the SMSC for the opportunity to join the club.**
- **I would also like to thank each of you for the opportunity to present this hot topic in fishing!**
- **Joining has been on my hot list, but I wanted to make sure I could spend the appropriate amount of time lending a hand. I am on the back end of grad school (MBA – Data Analytics) and trying to become empty nesters!**



A Little About Me...

- **Born in sunny Pensacola, FL on the Naval Airbase.**
- **Father was a F-4 fighter pilot, USMC. Mother was a Med Tech.**
- **Moved around a bit then settled to Lewisburg, WV in 1986 where my father entered WVSOM Medical School upon retirement from the military. His Discipline is ER medicine.**
- **Graduated in 1991 from Greenbrier East High School.**
- **Currently a 20 -year tenured Materials & Logistics Supervisor with Raytheon Technologies residing in Union, WV with my family.**

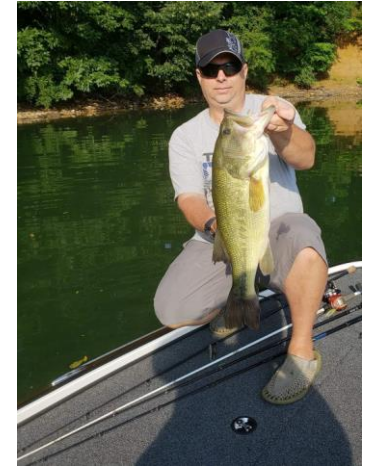
It started with this...



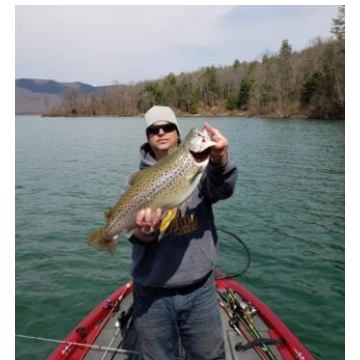
Blew graduation money on this!



Welcomed our 3rd child better later than never



And Memories
Continue To Be Made!





And Made!

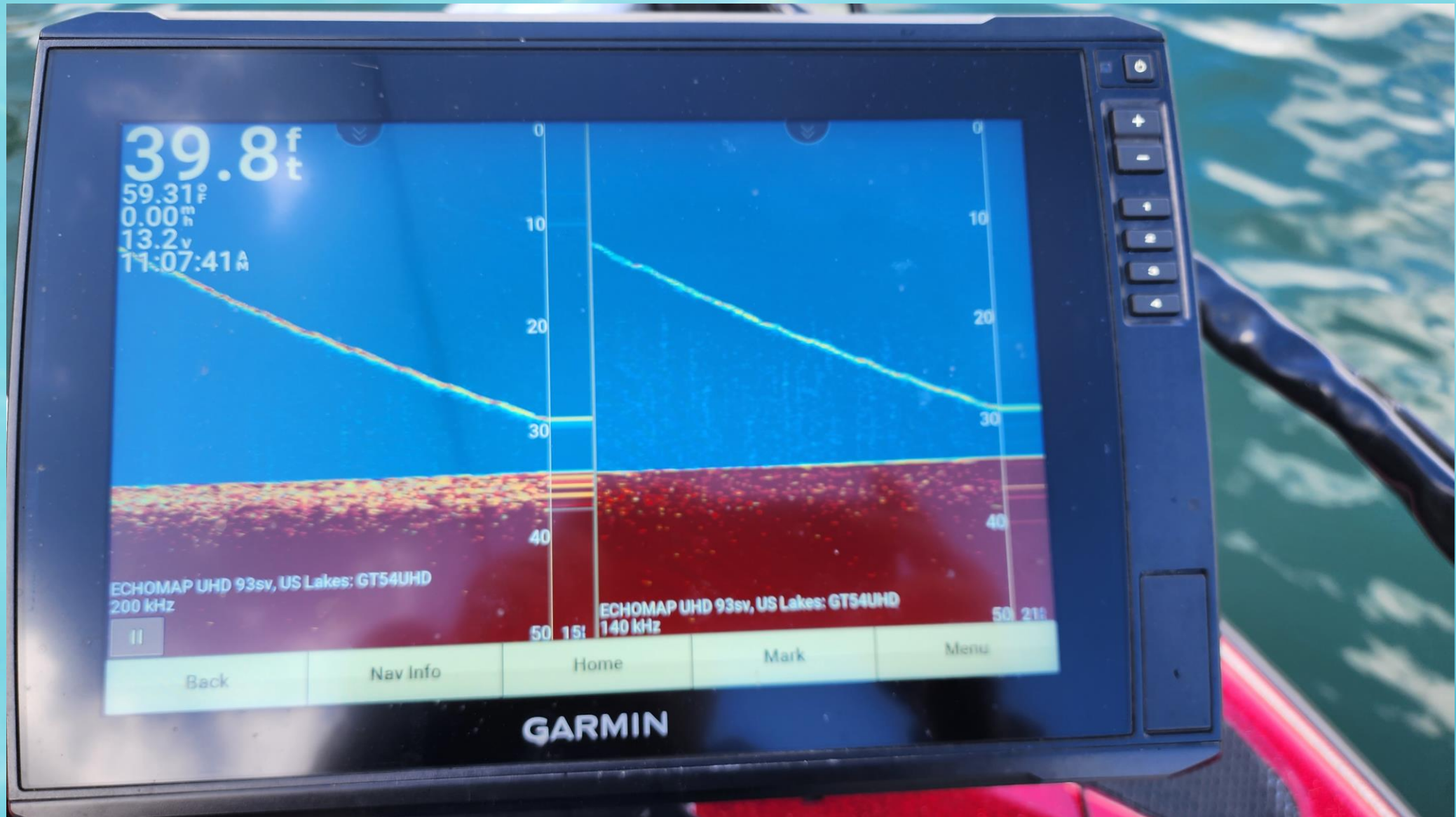


But this First Fish Changed My Life!

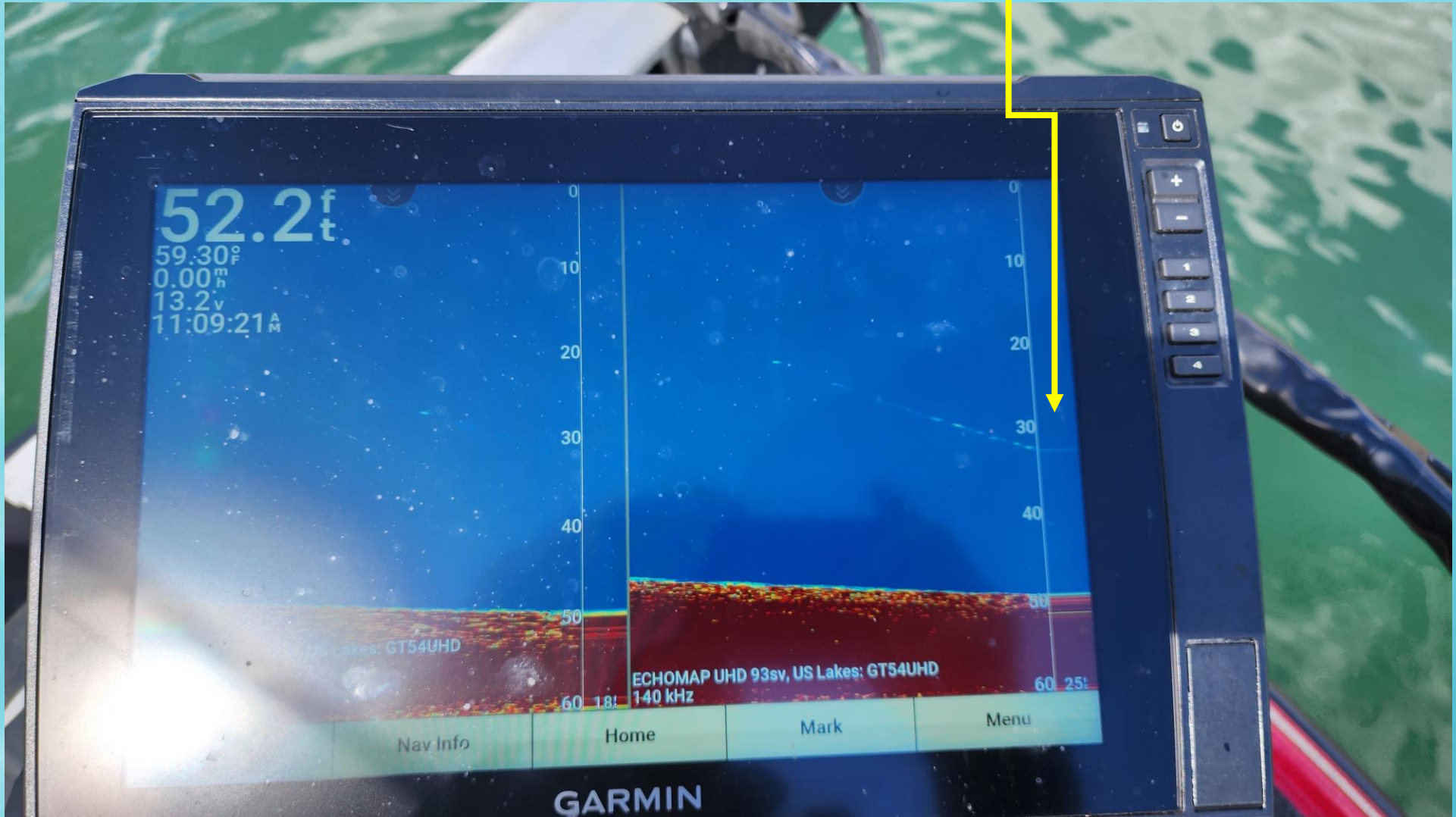
A Little Refresher First.....

- It is important to understand 2d split screen with Ascope (flasher).
- Offers the most coverage as well as a real time of what is going on underneath and around your boat.
- Examples – 77khz on the left, 200khz on the right.
- Garmin units such as the ultra and GPSmap will have 140khz to 200khz.
- The lower the number the wider the beam.

- Jig Dropped straight down. 200khz on the left, 140khz on the right. The box on the right sides is Ascope. The screen to the left is all history. You can see that dropping straight down is captured by both the narrow and wide beam. The idea here is to capture the entire beam width around the boat for greater visibility and better detail directly underneath the boat. The ascope is nice because you can watch the fish in real time move up and eat the bait.



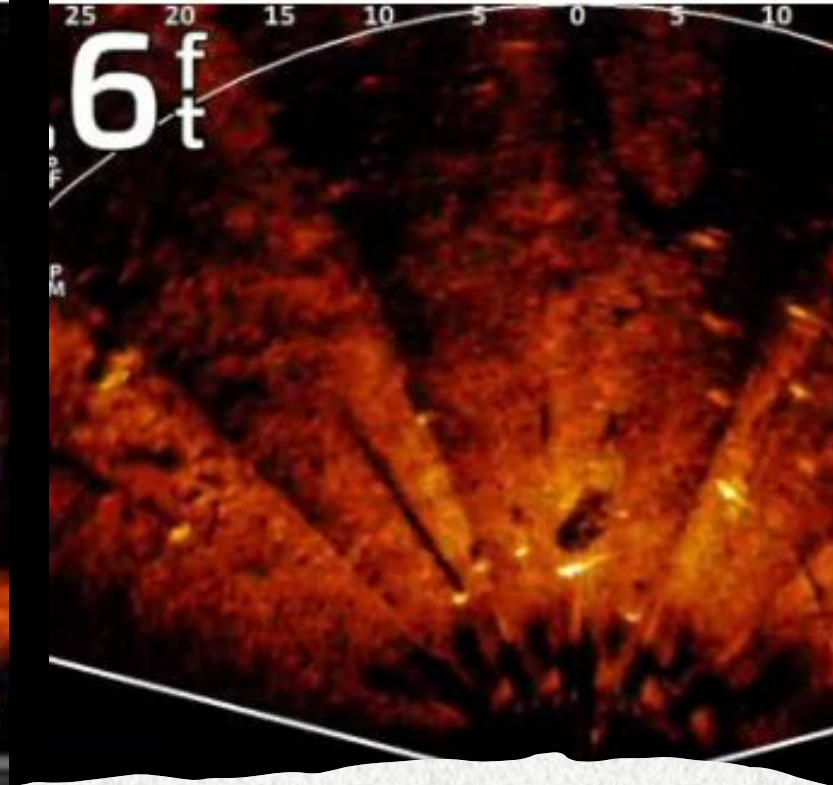
- The jig has now been dropped to the side of the boat, at the edge of the 140khz beam.
- Notice how the wider Khz picks up the jig, but the narrower, 200khz does not.
- Again, the idea of the split is to capture the most area.
- Yes, if you only run the 140khz, you can see fish both wide and under the boat, but running the 200khz gives much more detail under the boat for vertical fishing and target separation.



So, What is Forward Facing Sonar??

- FFS is simply an array of crystals that fire rapidly at different frequencies and different angles.
- The Pings are then sent to a black box that “stitches” them together.
- Finally, the “stitched” pings are sent to a screen that displays a real time, live picture of the underwater world.





3 Different Selections



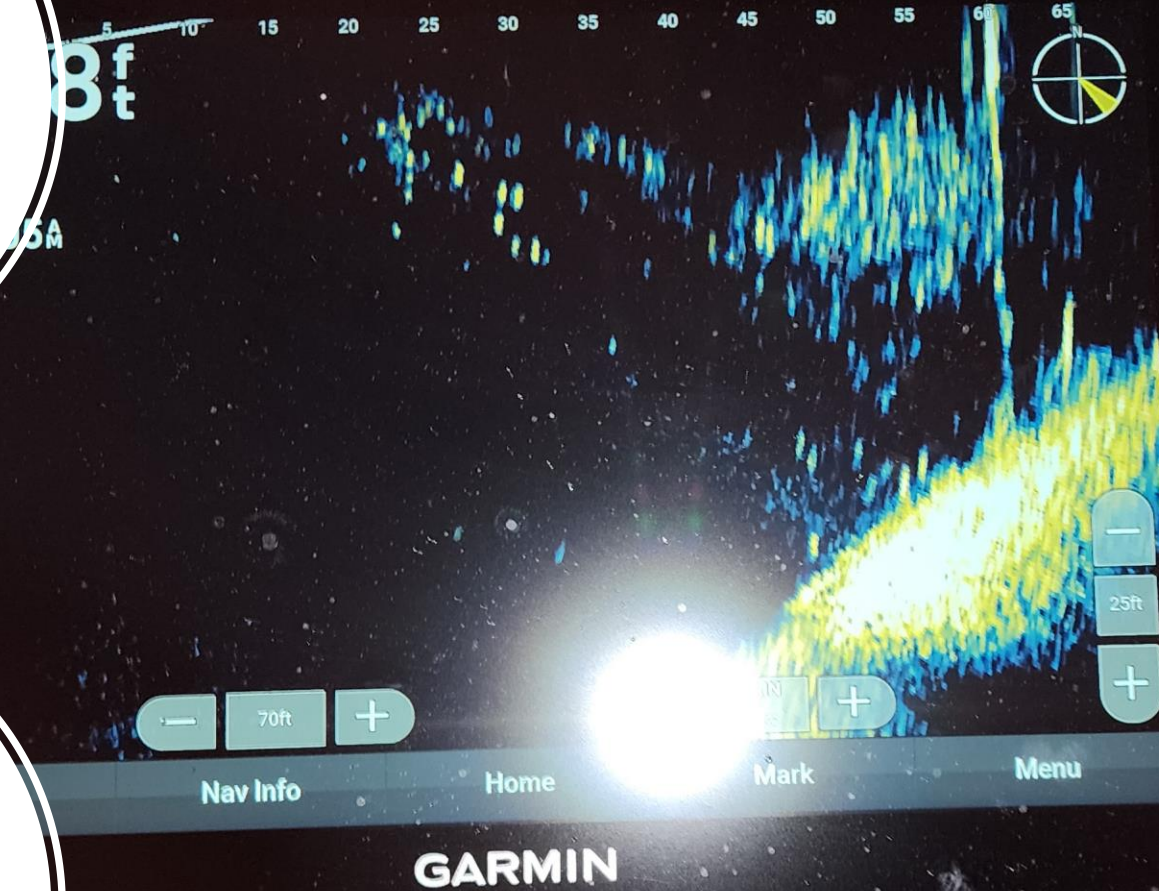
SEVERAL WAYS TO INSTALL - IMPORTANT TO PICK THE RIGHT ONE FOR YOUR FISHING!!!!

- Trolling motor shaft or barrel – Used when mobile fishing, searching.
- Individual pole mount – good for stationary fishing, spot locking. Requires either additional movement by hand or stomp pads.
- Transom mount – Not to popular, but it will work
- Sniper Pole! Quick release console mount – might be good for striper boats if no trolling motor.

LETS GET TO THE MEAT AND POTATOS.....

- We as striper fishermen are mostly fishing the water column, so I will NOT go into depth on Perspective.
- Mr. Hartman showed the down view, so I will just touch on that.
- The bulk of this presentation will focus on forward mode because that offers a view of the water column and offers the most coverage area with a simple turn of the trolling motor or handle.

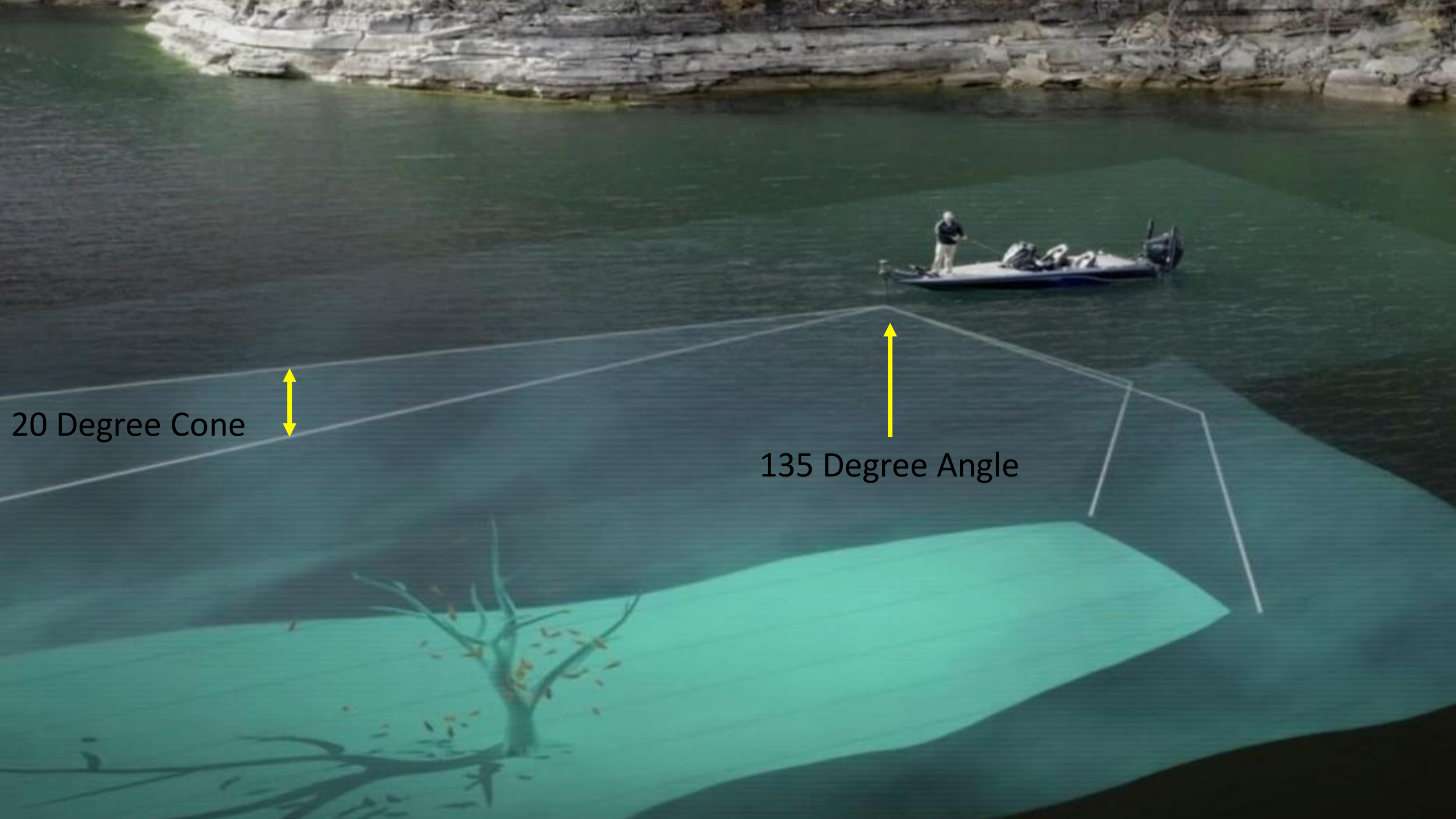
Why IS
Livescope
Important to
Fishermen
and Women?



There Are No
Stripers!

We Can Study
A Fish's
Behavior!

We Can Look
200 Feet in
Any Direction!



20 Degree Cone

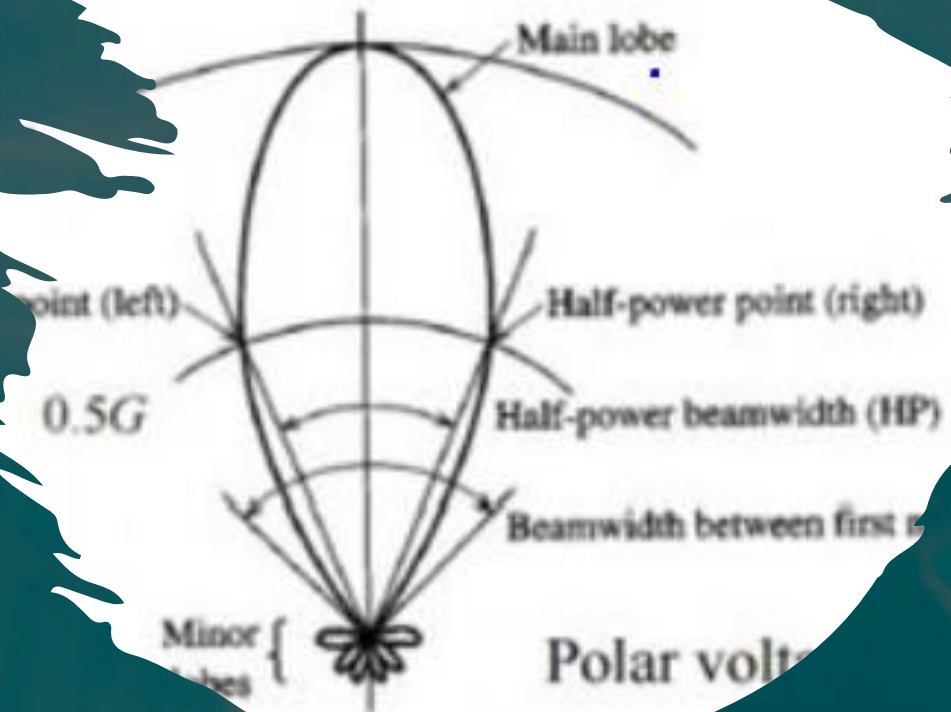


135 Degree Angle

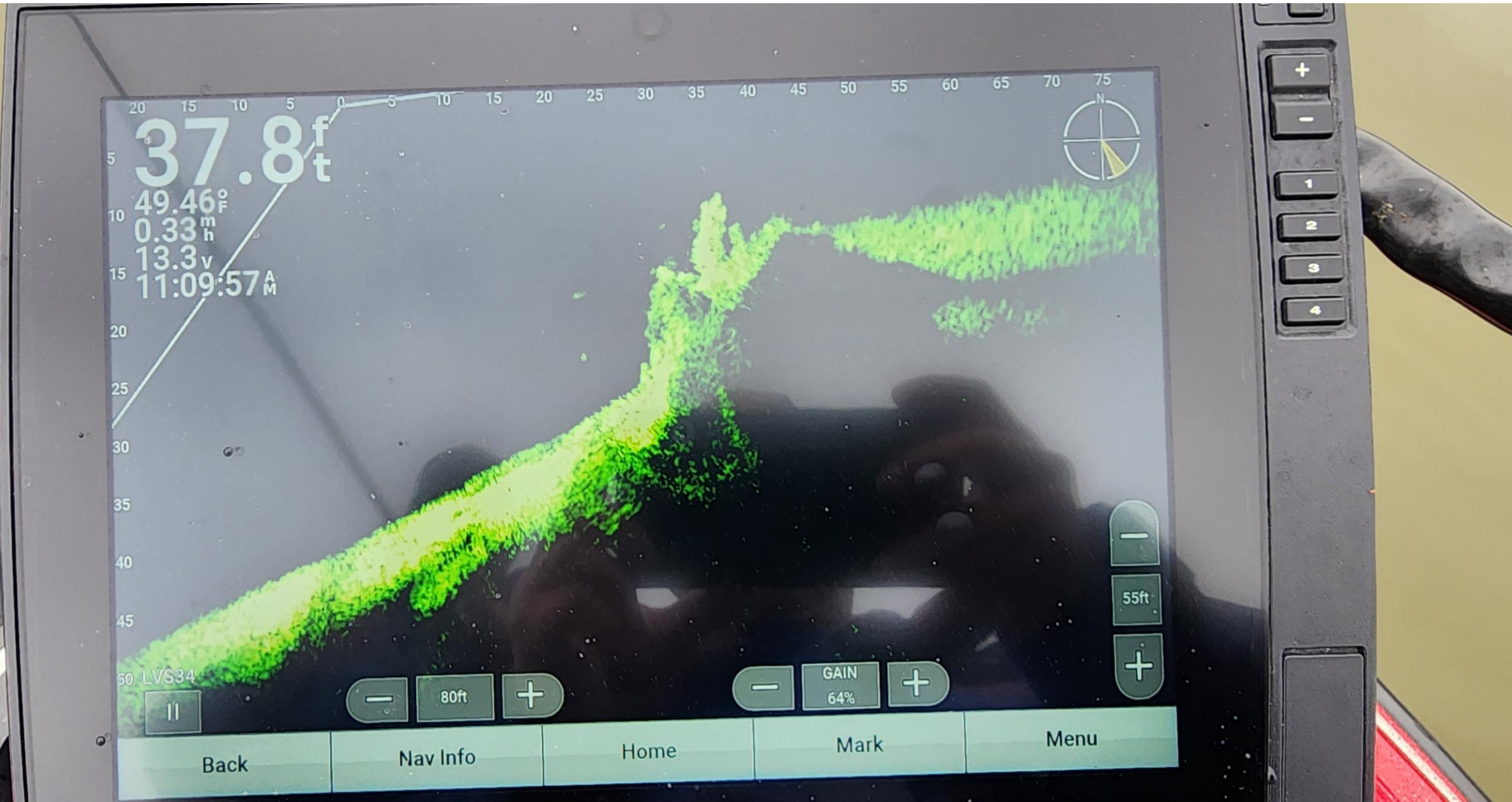


A Little More About Cones

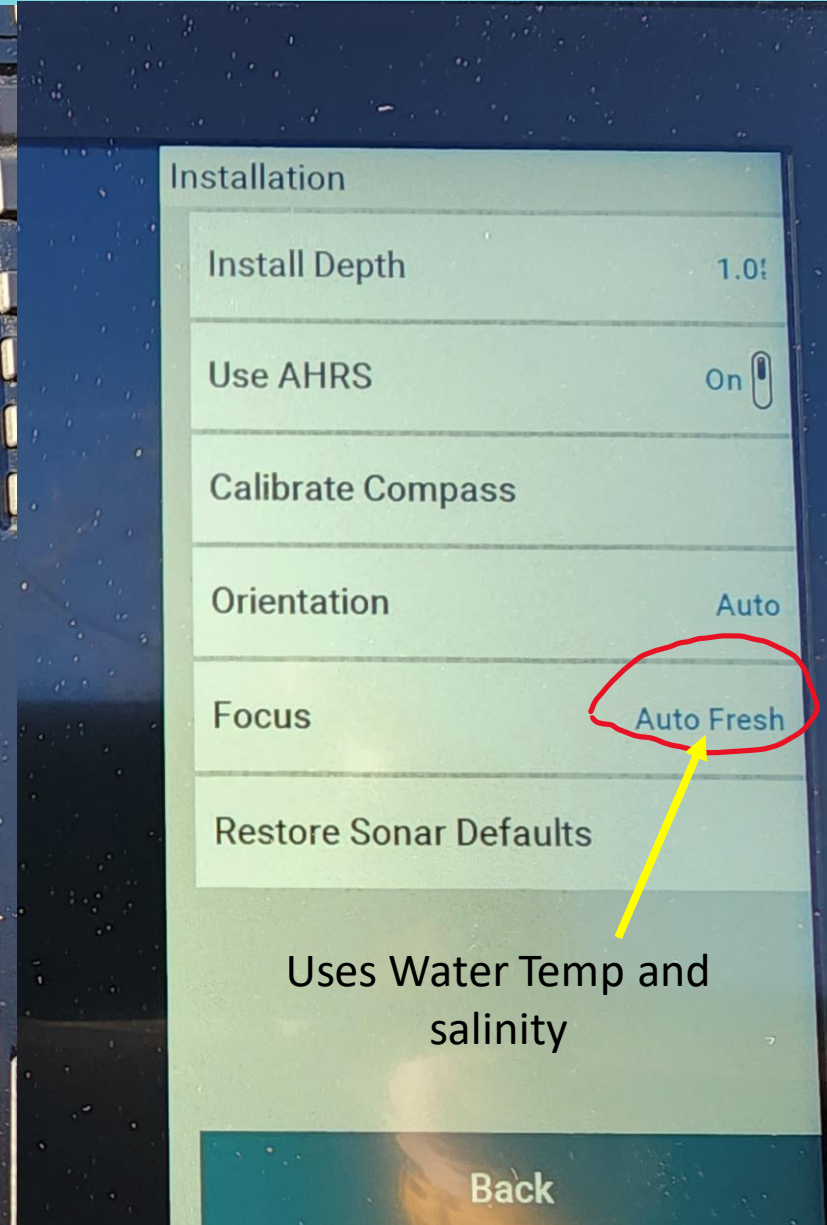
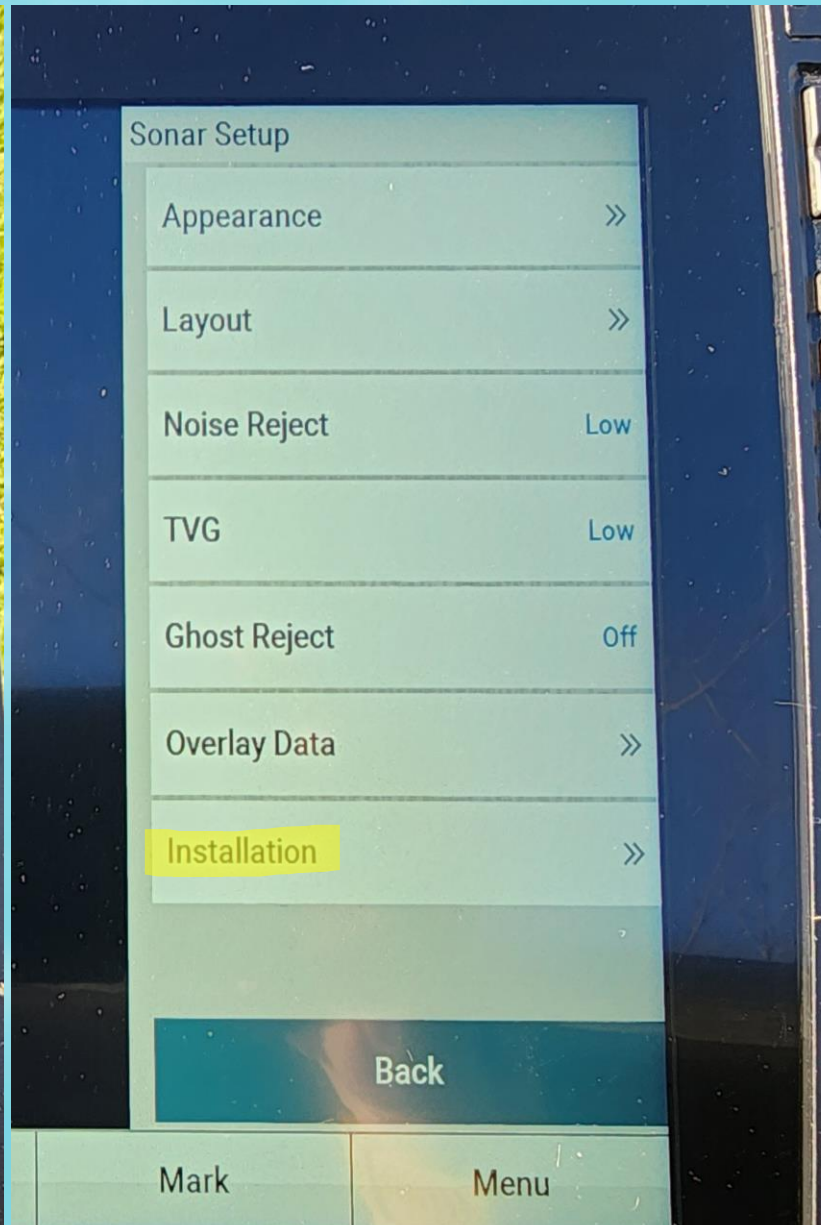
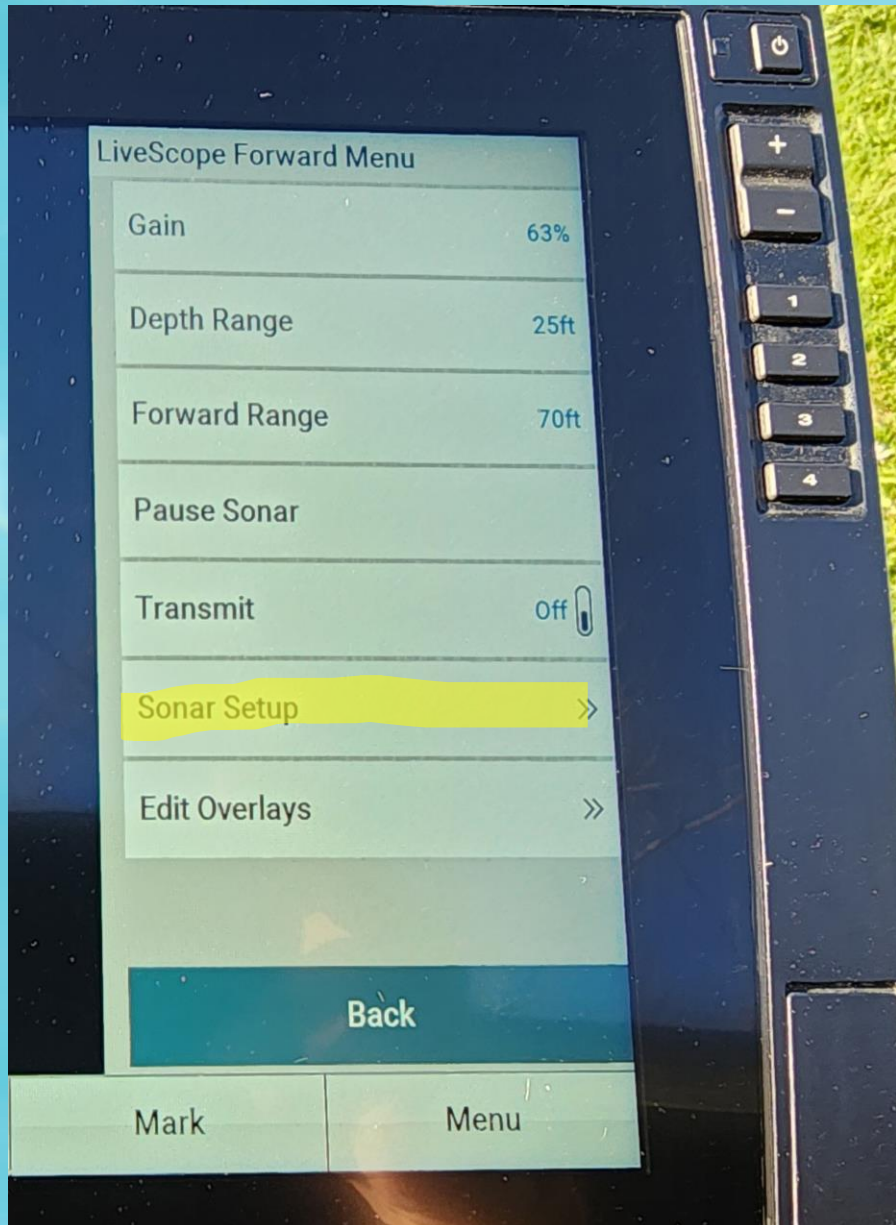
- A 20 - degree cone would mean at 25 feet forward, the width of the cone would be 8 feet. At 50 feet, the width would be 18 feet, and at 100 feet, the width would be 36 feet.
- This is true to a point and proven through tests on ice.
- However, Livescope utilizes a 530-1100 khz high frequency multi-array beam that shoots and elongated cone.
- This is evident by an ice test at 50 feet in which the scope picked up the jig beyond 9 feet right of center.
- As the beam goes further, the width of the beam begins to narrow and the left and right edges begin to provided a weaker return.



So What Are we Looking At?



Let Us Go Over How We Get Those Nice FFS Images!



The Focus Tab is a Hot Topic Lately, So Let's Watch the Garmin Guru Explain.

https://www.youtube.com/watch?v=rrC_BlpKsOw

-
- These next settings are important and will constantly need attention based on what you are fishing, water clarity, and depth
 - Livescope is hardly a plug and play system. To achieve best results, you must utilize the features.
 - Gain, depth, and forward range should be your hot buttons.
 - Color palette will depend on sun, shade, night, or in my case, color blindness!
-

Sonar Appearance

Color Scheme Floodlight

Color Gain 88%

Color Limit Default

Trails Off

Bottom Fill Off 

Lets Watch a Short Video From Garmin Explaining Important tabs in More Detail

<https://www.youtube.com/watch?v=Vur91aVFXtQ>

And One More to Go Over Reverse Range

<https://www.youtube.com/watch?v=SXXTWbSW5x4>

**Now that we have learned what livescope is, lets see it in action!
This is a short video for time constraints and hard to See Fred's
bait because of camera angle, but the important thing to note
here is the fish behavior.**

<https://www.youtube.com/watch?v=jSQz-RdyJFg>

Important Take-aways

- Try to use the Manual Depth. If you are in 100 feet and the fish are suspended in 20, half of your screen will be dead water and bottom. Set the depth to 10 feet deeper and enjoy a much bigger and detailed picture.
- Never stop adjusting gain, forward range, and depth. You will find the sweet spot each time you go out or move spots.
- If you rip a cable, the transducer doctor on Facebook offers excellent service and quick turnaround.
- The most important aspect of FFS is watching fish behavior.
- And lastly, if anyone tells you FFS is cheating, ask them if using a chainsaw while logging is cheating as well!!!!!!