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Electronics

The Electronic Edge

FISH SAVVY COMBINED WITH ELECTRONICS KNOW-HOW EQUALS SUCCESS.

BY DAVE LASKA



BILLY BLACK

Powerful electronics will not only get you to the fish, but may help you put them in the boat, as well. Shown here: Simrad's NSO evo with 16-inch touch displays.

I love to hunt bigeye tuna in the Northeast canyons. And I never get tired of four rods arcing over at once.

Back in the 1980s and '90s these fish were easier to catch because there was more bait, thus more tuna. I have seen bigeyes on the scales at the dock — caught over the Hudson Canyon back when pair trawling was still permitted — that weighed in the low-300-pound range. Now, with less bait and seemingly fewer fish, I need today's electronics to give me the proverbial leg up.

Here's an example. When I run across a concentration of bait out on the edge that shows up on my video sounder, I first mark the target on my chart plotter. I then start looping around the school to determine how big a pod I'm working on and at what depth

it's holding. If I have trouble finding the bait again, it's a sign that these schools are moving rapidly and aren't being corralled by tuna.

If the bait is holding stationary in a "bait ball," however, it usually means something much larger is keeping the fish tightly schooled. At that point I consider the water depth and the likely game fish below. If the bait is holding over flat bottom in 75 fathoms, I know I'm more likely to find yellowfin or longfin tuna, rather than the heavier bigeye. So if I'm fishing a tournament I might well pass on this opportunity and keep scouting for the larger bigeye tribe.

If I run across a bait ball in 100 to 500 fathoms and the sun is dropping, however, I'll stay with this bait until sunset. Many times I've marked a good concentration of bait on

an edge but thought the bait was too deep, hovering at 20 to 30 fathoms. Rather than scurry off to tie up to the nearest high flyer, I've learned to stick with the bait and troll over and around it. As the sun sets, the lower light becomes an advantage for feeding tuna. Even if your boat is 120 to 180 feet above the bait, there is a good chance that the commotion it creates will entice one curious tuna to break away and come up to investigate, and several more may follow, due to their competitive nature.

There's nothing more satisfying than pulling up to the night-chunking fleet, fashionably late, after putting a pair of bigeyes in the boat. This old-school method requires patience, confidence in your trolling game and the smart use of your electronics.

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THE ELECTRONIC ADVANTAGE

In my business of installing electronics, I serve commercial fishermen, pros such as charter captains and tournament fishermen, and everyday anglers.

There's certainly no shortage of high-tech devices to help all three groups in their pursuit of fish. CHIRP depth-sounding technology, 3-D sonar imaging, thermal night vision, HD digital radar, Sirius weather receivers and a host of other equipment — much of it derived from the commercial-fishing sector — are making inroads into the recreational market.



The author (second from left) with a 267-1/2-pound bigeye tuna.

So who has the edge today? It depends. Offshore, commercial fishermen often have the advantage simply because they're out there every day, working and tracking fish. Many maintain extensive logbooks containing years of fishing history, and a lot of these guys share information and work closely with other commercial operators. Even those who move around at only 10 knots may not need cutting-edge equipment because they've learned how to

predict fish behavior through years of experience.

In my opinion, it's the offshore angler, the guy who's not out there every day, who can benefit the most from utilizing the latest technology. He's certainly at a disadvantage when he tries to track down pelagics armed with little more than hearsay from folks back at the dock; even if the information is accurate, it may be days or a week old. But if he understands today's marine electronics and uses them to their full potential, the weekend angler can be surprisingly successful.

RADAR ... FOR THE BIRDS

Radar is a good example. Yes, it's primarily a navigation tool, but it can help find fish, as well. Today's radars feature such technologies as HD Digital, Super HD, Broadband — each manufacturer has its own marketing marquee — all of which improve imaging.

Depending on how high your antenna is mounted, you should learn to pick up a squadron of birds working a tide rip and even predict the direction the game fish are pushing the bait. You can then position your boat favorably in front of the action rather than attempting to come up on the activity from behind. It goes without saying, of course, that you need to take the time to practice with your unit in order to get the most out of it.

With an absence of birds, you should be able to detect on radar when the tide has turned by lowering your sea state control and watching for the wave pattern. And there are plenty of mini-eddies offshore that will show up on radar, which are often worth a shot when you're trolling.

NOWHERE TO HIDE

New depth sounder imaging technologies such as 3-D down-viewing sonar really take the mystery out of what's holding the fish in a particular location by providing a Polaroid-type snapshot of the sea floor. Professional fishermen may or may not know the exact makeup of the structure they are fishing over, but rest assured they will figure out which corner of the hotspot to work as the tide ebbs.

For the recreational fisherman, the ability to see the orientation and vertical relief of the bottom target, such as a wreck, allows him to bet-

We're not in Kansas, Toto

A few years back, I fished an overnight tournament out on the 100-fathom drop-off. It was a steamy August evening, and around 11 o'clock the sky to the north of us over Long Island, New York, lit up with a spectacular lightning show.

I had the radar set at maximum range and could easily see the substantial squall line on the screen about 60 miles away and moving east at around 15 mph. It was a coastal front that wasn't likely to interrupt our evening, as we were well off the beach.

About a half-hour later, at the peak of the lightning display, the diesels in a 70-foot custom battlewagon drifting off our port bow rumbled to life. My first thought was that he had hooked into something big and needed to do some maneuvering. To my surprise, the captain headed due north at 20 knots, into the darkness and the lousy weather. A few minutes later, six or more other boats also headed for the beach, right behind him.

The chatter on the VHF was that a tornado warning had been issued and the public was advised to seek shelter. That's odd, I thought, because our boat was equipped with a Sirius weather receiver, and I hadn't received the audible warning that accompanies such emergency bulletins.

My brother went up to the fly-bridge to check things out. When he returned, he had a big grin

on his face. Indeed, there was a tornado warning issued — for Kansas! Apparently the skipper of the big sportfish had installed the unit himself and had not programmed it properly. When he saw the word "tornado" on the display he headed back to port. Unfortunately, six other boats followed his lead, straight into harm's way. And they missed what turned out to be a very productive night.

The lesson here is not to make major navigational decisions based on a single source of electronic information, especially if that information seems questionable.

Although this may sound self-serving coming from a veteran installer, the days of mounting a unit with four screws and connecting the power no longer constitutes a proper install. For today's integrated displays and accessory modules to properly communicate with each other, it's mandatory that all nodes operate on the same software revision. It matters not that all the component boxes were shipped directly from the manufacturer at the same time; the software revisions probably don't match or are out of date.

I can't tell you how many times we've been called out for reported hardware issues on DIY installations, only to diagnose the problem back to incompatible software revisions.

ter understand how the target species is using the wreck to conserve energy by deflecting the tidal current.

A good video depth sounder will detect any fish below you, but a CHIRP or broadband-enabled sounder will indicate how many fish there are and whether they are layered. CHIRP sounders can "see through" a pod of bait or cloud of dogfish to determine whether there are game fish below.

And if 3-D down-view, structure scan, broadband and CHIRP aren't enough, Furuno has just started to ship its Bottom Discrimination sounder, trade-named BBDS1. This technology uses a software algorithm that helps indicate the sea-floor type and hardness, a fluke fisherman's dream!

Can't make up your mind which technology is best for your type of fishing? Many of today's multifunction displays are capable of controlling two sounder modules that can be selected right from the display screen. Bear in mind, however, that a second sounder module will require its own dedicated transducer.

TROLLING ... IN THE DARK?

Can a thermal-imaging night vision camera help you catch more tuna? It sure can. A night-vision device gives you the visual confidence to

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release the high flyer in the middle of the night and drift into more productive grounds instead of sitting in water that has gradually turned lifeless and cold halfway through your evening.

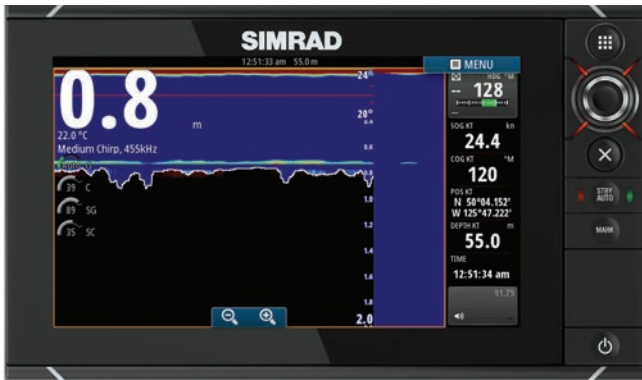
I've been offshore many times when the action petered out at 4 a.m., and everyone on the 100-fathom curve brewed a pot of coffee and waited for gray light. Our boat, however, would deploy our outriggers and slowly pull squid bars through the resting fleet.

My waypoint might be 1 nautical mile down-drift of all the bait that has been tossed into the water during the night. Radar will easily get me the distance from the fleet I want to be, but the night-vision camera will

get me lined up on everyone's transom, where the bait is coming from.

One boat trolling squid rigs through a giant bait slick before false dawn is a buffet for bigeye tuna. That's a big advantage. When all 50 boats start their engines at 4:45 and start pounding the area promptly at 5:15, the fish scatter and the game is largely over before it starts.

I've been in the business for more than 30 years, and I can tell you that today's electronics are a bargain for the technology they offer. Take the time to understand how they work and what they can do. These devices not only will take you to the fish, but they'll help you put them in the boat, as well. 🐟

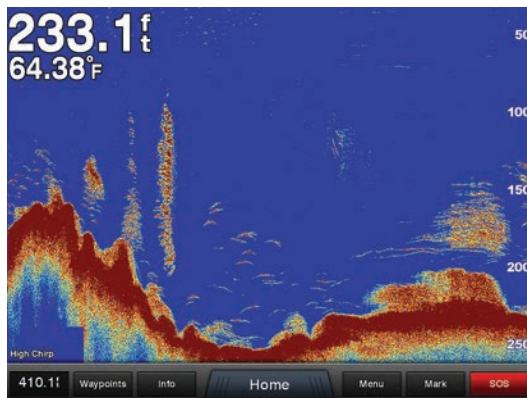


Simrad BSM-2 Broadband Sounder

Simrad has made a good thing better with a free software update for its BSM-2 Broadband Sounder (\$2,295), making the unit fully compatible with the new range of Airmar Wide CHIRP transducers. With v1.8, the BSM-2 promises more solid bottom colors and tracking while maintaining a clean, noise-free water column. Fish the deepest waters on the planet with imaging capability to nearly 10,000 feet. The BSM-2 has multi-frequency, dual-transceiver capability (25-45 kHz, 40-60 kHz, 90-150 kHz, 130-210 kHz) and is fully waterproof. simrad.com

Garmin GSD 26 Black-Box Digital Sonar

Garmin set its sights on sport anglers with the GSD 26 black-box sonar. Spread Spectrum technology sweeps each pulse through a range of frequencies to deliver target separation throughout the water column and offer performance at depths down to 10,000 feet. The GSD 26 (\$1,999) can be manually adjusted to frequencies from 25 to 210 kHz depending on the transducer, including Airmar's newest



broadband transducers. Transmit power is 300 to 3,000 watts, and the sounder is compatible with the latest Garmin GPSMAP 8000 Glass Helm series plotters. garmin.com

Raymarine T250 Thermal-Imaging Camera

Raymarine's T Series fixed-mount compact night-vision cameras reveal floating objects, navigation aids, other vessels or people in the water using FLIR thermal-imaging technology. The T250's (\$4,499) has a small footprint (7 inches tall, 5.9 inches in diameter) and simple, two-cable installation, and offers enhanced long-range performance with a 25mm lens and 4X digital zoom capability. raymarine.com



Furuno DRS12A UHDD Radar

Furuno took its radar to the next level with Ultra High Definition Digital, which delivers clear, noise-free target presentation with automatic real-time digital signal processing for its NavNet 3D and TZtouch MFDs. The DRS12A (\$5,500) incorporates a 12-kW T/R and 4- or 6-foot open-array antenna (an additional \$1,175 or \$1,675, respectively). Antenna rotation speed (24/36/48 rpm) is automatically shifted to optimize pulse length. With each sweep, dual progressive scan transmissions are sent, received and processed to display two separate radar ranges simultaneously. furunousa.com