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Title: Franklin county chronicle

A Gene Test for *Vibrio* *Vulnificus*—Part III

By Frank Stephenson

Reprinted from *Research in Review* (Florida State University)

"What the hell are 100 people going to do for a living for six months? That would just about put all of us out of business altogether. It would be a disaster for this community, and that's a fact."

Meanwhile, Reeves & Co. are pursuing their patent application and hoping that circumstances will work to their favor in other areas where the probe's usefulness may prove itself.

Prevalence of these fish in doctors' offices and hospitals, where victims of vibriosis possessing usually wind up—too late in many cases—for treatment. At present, physicians who wait for the results of blood tests before prescribing heavy doses of antibiotics for patients who check in with fever and other flu-like symptoms do so at their patients' peril. *Vibrio* poisoning can be the equivalent of a snare bite—victims can die in as little as 30 hours after exposure. So by the time standard tests prove positive for vibriosis the patient either would be on the road to recovery, or about half typically would be, or dead. A quick and easy method of checking for the pathogen would let medical personnel take immediate and proper counter-measures. Instead of shooting in the dark, rapid diagnosis also could help public health officials quickly pinpoint the source of the infected systems and move more swiftly in dealing with the problem.

The FSU probe also may find a use in the oyster business, even if a quality standard never becomes a reality. Reeves said. Shippers could use test kits featuring the probe to help certify a certain level of quality before their product ever leaves their warehouses. Regulators also could use the probe as a potentially better means of ascertaining how well systems are handled from the time they leave the water to their arrival at the marketplace. Any substantial success in utilizing the probe could point a finger at poor refrigeration or sloppy packaging and shipping.

Success with this *vibrio* probe has spurred Reeves' lab to pursue development of other kits. Thomson has developed an effective probe for detecting the antibodies that cause cholera, a severe gastrointestinal disorder that while under control in the U.S., still plagues many Third World countries. Last year the university filed a patent application on the cholera probe and also for another lab invention a DNA "tagging" technique for tracking down disease-causing bacteria to a common source. Reeves and Thomson see no limits on gene probe technology's applications in such fields as agriculture, biomedicine, environmental science and quality control in industry.

"DNA probes now represent the basis of a whole area called molecular diagnostics," Reeves said. "We're just beginning to appreciate the enormous potential this technology has for helping researchers and physicians diagnose and treat a wide range of genetic and infectious diseases."

Tide Tables St. Marks Lighthouse

October 11th - 26th		EST	
11 H 8:16 AM 3.5F	19 H 2:09 AM 3.8Ft		
Tu L 2:19 PM 0.6	W L 6:48 AM 0.1		
W H 8:54 PM 2.8	Th L 8:43 PM 1.2		
12 L 1:35 AM 2.0			
Th H 7:45 AM 5.2	20 H 2:36 AM 3.8		
F L 3:40 PM 0.8	Th L 9:20 AM 0.1		
Sa H 10:15 PM 2.8	H 3:42 PM 3.6		
	L 9:11 PM 1.2		
13 L 3:24 AM 1.9			
Th H 8:59 AM 5.1	21 H 3:01 AM 3.8		
F L 4:54 PM 3.0	F L 9:52 AM 0.1		
Sa H 11:18 PM 3.0	H 4:15 PM 3.5		
	L 9:41 PM 1.3		
14 L 5:03 AM 1.6			
F H 11:32 AM 3.2	22 H 3:27 AM 3.8		
Sa L 5:53 PM 1.0	Sa L 10:24 AM 0.2		
	H 4:51 PM 3.4		
15 H 12:03 AM 3.2	23 H 3:56 AM 3.7		
Sa L 8:09 AM 1.2	Su L 10:58 AM 0.3		
H 12:33 PM 3.4	L 5:30 PM 3.3		
L 8:38 PM 1.0	L 10:48 PM 1.5		
16 H 12:40 AM 3.4			
Su L 6:57 AM 0.8	24 H 4:27 AM 3.6		
H 1:19 PM 3.5	M L 11:35 AM 0.4		
L 7:15 PM 1.1	H 6:14 PM 3.2		
17 H 1:12 AM 3.5	L 11:29 PM 1.8		
M L 7:37 AM 0.6			
H 1:59 PM 3.6	25 H 5:04 AM 3.4		
L 7:46 PM 1.1	Tu L 12:20 PM 0.5		
	H 7:58 PM 3.0		
18 H 1:41 AM 3.7			
Tu L 8:13 AM 0.2	26 L 12:21 AM 1.7		
H 2:34 PM 3.6	W H 5:50 AM 3.3		
L 8:15 PM 1.2	L 1:17 PM 0.7		
	H 8:15 PM 2.9		

Tide Corrections For Your Area

	High	Low
St. Johns River	+ 0.15	- 0.03
St. Johns River	+ 0.03	+ 0.05
Shall Point	+ 0.05	+ 0.03
Dickerson Bay	+ 0.16	+ 0.20
Bald Point	+ 0.33	+ 0.19
Alligator Point	- 0.08	+ 0.11
Turkey Point	- 0.12	- 0.18
Dog Island	+ 0.07	+ 0.06
St. George Island (East End)	- 0.16	+ 0.08
St. George Island (Sikes Cut)	- 0.49	+ 1.22
Apalachicola	+ 2.00	+ 2.44
St. Joseph Bay	- 0.24	- 0.51
Panama City	- 0.43	- 0.44
St. Andrews Bay (Channel Entrance)	- 1.31	- 2.02

Facts About *Vibrio vulnificus*

- At least 11 species of *Vibrio* are known to cause disease in man, but three subspecies are the most common of the disease associated with raw oyster consumption during the fall and winter months.
- The presence of *Vibrio vulnificus* is not associated with pollution. The bacteria are a naturally occurring member of the microbial flora in shallow, coastal systems in temperate latitudes throughout most of the world.
- The first documented case of human illness caused by the organism occurred in 1973.
- Vibrio* may concentrate in plants, oysters, shellfish and in finfish.
- More than 100 deaths of humans have been documented, and not all are disease-causing.
- Healthy individuals are rarely susceptible to *Vibrio vulnificus* illness. Those who consume raw oysters are 50 times more likely to get sick and more than 200 times more likely to die from eating raw oysters infected with *vibrio* than a person who does not eat oysters.
- Seventy-two cases of *vibrio* infection from raw oysters were reported in Florida from 1981 to 1992, and 29 (65 percent) patients died. Many of the infections were fatal. Other reported deaths from *vibrio* infection in Florida:
- Of the 40 deaths from *vibrio* infection reported in Florida from 1981 to 1992, 30 were attributed to consumption of raw oysters containing *Vibrio vulnificus* and eight others were attributed to raw oyster consumption from other sources.
- Consumption of raw oysters are not advised for high risk individuals. They have had open wounds, liver disease, alcoholism, are under immunosuppressive treatment for cancer or any other disease, are HIV positive, are dialysis, have chronic kidney disease or have sickle cell anemia, a condition where the normal rigidity of the blood is low.
- In 1992, an estimated 71,000 Floridians with liver disease consumed raw oysters and ingested raw finfish. The illness rate of those who ate oysters was 10 times higher and the death rate 100 times higher than those who did not.
- Of the human species of oysters associated with *vibrio* infection in Florida, 85 percent were purchased at restaurants. None were from shell harvesting facilities.
- Most commonly, *vibrio* infection from oysters occurs in people who eat oysters from the shell. Symptoms include fever, chills, abdominal pain, muscle aches, nausea, vomiting, and diarrhea. Additional pain, rapidly followed by fever and chills.
- Treatment of *vibrio* infections is with antibiotics such as tetracycline, chloramphenicol and penicillin.
- Warm weather months—typically from June to October—when oysters harvest begins in seawater are the best. From December through April, the oysters are harvested in the bay. The oysters are harvested from the bay during Florida's oyster production season.
- The organism can be eaten, but does not kill a person who eats a small amount. The organism is easily killed by cooking. The recommended cooking times for oysters and finfish are listed in parentheses in the table below. An estimated 400,000 oysters are harvested in Florida each year.

Big Bend Association for Citizens With Disabilities

By Cynthia Mercer

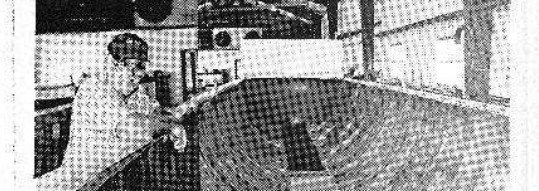
Franklin County has a unique Marine Vocational Research and Technical Center being established in Carrabelle. The center, which was chartered by Vocational Rehabilitation Counselors Craig Shuler, will be used as a Vocational Training Facility for citizens with disabilities.

The primary goal of the Research and Technical Center is to provide job training opportunities to citizens with disabilities. Scheduled tours of the center will be offered by Aquaculturist Jerry Bush upon the facility's completion. The tours will provide Franklin County residents with "inside" on knowledge about state-of-the-art technology in the Northwest Gulf Coast of Florida.

The Big Bend Association is presently applying for several different state grants to help support the center's establishment. However, the project is now being funded solely by voluntary donations. Some acreage has already been leased from the Sportsman's Lodge. The Big Bend Association is using the land to develop a public campground where some of the center's first graduates will find permanent employment.

The Big Bend has scheduled an Open House on 17 November for interested individuals to tour the Marine Vocational Research and Technical Center. The site is located on River Road in Carrabelle. Those interested in obtaining further knowledge about the center may contact Project Coordinator Cynthia Mercer at 897-3295 or Executive Director Craig Shuler at 653-5730.

Bill Bailey shows off the Center's "Grow-Chat Tank"



Lake Talquin—A Florida Success Story—Part II

By Handle Leger

With the wonderful days of fall just around the corner, our thoughts turn away from the blistering humid heat of summer. Fall not only offers more favorable weather for fishing but great areas and fewer boats on the water. The fall of the woods will take many sportsmen out of their seats and into a game stand. For the non-hunter this means we can often have our favorite water courses.

Lake Talquin, the money water, can come alive during this five-year and even the never-ender can experience successful trips. The following information should help the first-time Talquin fisherman bypass the time-paying traps and go directly to success on the water.

A good predator population almost always results in a healthy predator population and Lake Talquin is no exception. This lake is blessed with strong numbers of bluegill, redearhead, shiner-cracker and speckled perch. During the time of year I don't matter how or where you go to fish, you almost guaranteed action. From the stumpy, upper reaches of the lake to the huge, open, lower end, good concentrations of "bait" fish can be easily found.

The shore-line fisherman can start on almost any bank located near the mouth. The most productive technique is to use a trolling motor and slowly move down the bank. Using a cane pole, flip worms or worms up to the edge. If a fish is taken, it won't take long for the cork to appear. This technique is especially productive in the morning or late in the afternoon.

Once the sun is on the water, action can taper off considerably. When the sun is strong, simply change your pattern a little. Begin looking for speckled basses that are overhanging trees and bushes. Also keep a sharp eye for noisy jacks that regularly occur on this lake in late summer and early fall.

Another excellent, pattern is to anchor in the mouth of any of the many coves of the lake. Look for water between 8 and 12 feet deep and set out as many poles as you can comfortably handle. This is a waiting and snubbing game. If you get enough baits in the water and wait long enough, eventually you will catch fish. These fishermen are jokingly referred to as "split-bait" because, from a distance, a small boat with 7 or 8 poles hanging out bars an amazing resemblance to a split-bait. Holding one doesn't necessarily mean you are going to beat him. Keep a firm grip on your rod and let the drag wear the fish down. Patience and well-maintained equipment will normally triumph in the end.

Fall brings another Talquin favorite to life, the striped bass. These beautiful fighters have followed a faithful and true group of followers that rely on the cooling of cooler weather. Inactive and lethargic during the summer months, this saltwater species has transformed into the lake's best fighter as water temperatures drop to their level of comfort. These fish may be found anywhere in the lake once temperatures allow but some of the favorite haunts are Oldmans Creek, Mosley Comfort Creek, the mouth of Little River, Soapstone Creek and in the deep water near the dam. Silver spoons and white bucktail jugs will catch the best of fish but the old-time favorite bait as without a doubt live staid. Staid can be free-lined or fished beneath a cork but however you fish, they hang on. A striped bass has the strength of a redfish and the speed of a muskellunge. Holding one doesn't necessarily mean you are going to beat him. Keep a firm grip on your rod and let the drag wear the fish down. Patience and well-maintained equipment will normally triumph in the end.

Lake Talquin offers many species of fish to spend your day chasing, but the most popular is the largemouth bass. Bass anglers will travel hundreds of miles for the chance to do battle with the greatest sportfish of the Southeast and Talquin is the destination for many.

In the fall of the year, bass fishing Lake Talquin is similar to pan-fishing in that shallow and deep water can be productive.

Larkin "bank bangers" can consistently score with quality catches especially during low-light conditions, but even on a productive lake such as this it pays to do a little homework. The best advice will

Continued on page 5

DR. EDWARD T. SAUNDERS SPEAKS TO YOU ABOUT HEALTH!

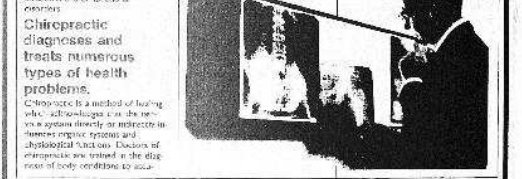
MANY ILLNESSES ARE RELATED TO SPINAL PROBLEMS

The human body is a carefully integrated unit. The human body is a carefully integrated unit. Any dysfunction of one system or organ can affect the entire body. The human body is a carefully integrated unit. Any dysfunction of one system or organ can affect the entire body.

As a concerned member of the health team, the doctor of chiropractic has the obligation as the health of the person. The doctor of chiropractic has the obligation as the health of the person. The doctor of chiropractic has the obligation as the health of the person.

The doctor of Chiropractic values the human element. A chiropractic relationship is a unique one. Not only should you have confidence in your doctor, but you should also feel that he is concerned if you, concerned with all your problems, and discuss to serve you conveniently. You should feel free to talk to him or her about your health matters, whether real or imagined, without reservation and to have your concerns treated with an open interest and attentive investigation.

Chiropractic's comprehensive approach to the prevention and treatment of disease and disability utilizes an approach which does not shuttle patients from doctor to doctor, a procedure that does not confine the individual to high cost hospital care, an approach to treatment that strives to keep the patient ambulatory and on the job and which avoids prescription drugs and major surgery.



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