Friends of Perdido Bay
38 S. Blue Angel Parkway
PMB 350
Pensacola, FL 32506
850-377- 4264

ADDRESS SERVICE REQUESTED

TIDINGS

The Newsletter of Friends of Perdido Bay

June 2026 **Volume 38, Number 3** **Jackie Lane- Editor**
www.friendsofperdidobay.com

Thank you

Your membership has allowed Friends of Perdido to continue to exist and advocate for a cleaner and more productive bay. We believe our waterways should not be dumping grounds for industrial pollutants but productive bodies of water capable of sustaining fish and wildlife and recreational enjoyment for residents. Unfortunately, this description does not fit Perdido Bay, at least not upper Perdido Bay. The Florida Department of Environmental Protection has allowed International Paper Mill to discharge toxic and herbicidal pollutants into our bay. The result – a nearly dead bay. With your support, we have continued to sample to show how International Paper Company is impacting Perdido Bay. We are hopeful that the papermill will close soon. Old papermills built in 1941like the IP mill in Cantonment, FL, cannot justify major renovation. So, they will continue to pollute. It is time they close.

A Great Big Thank you

As you drive south on Bauer Road from Highway 98 to Sorrento Road you pass by many acres of flat, often wet, piney woods. This area is home to the endangered white topped pitcher plant, an area unique in the world for its collection of these carnivorous plants. The topography of this area, in

southwest Escambia County, represents the ancient shoreline with relic sand dunes interspersed with low wet areas. Many lakes can be found within this area maintained by up welling, ground water. Much of this ground water flows into surrounding waters like Perdido Bay and Herron Bayou. If you look at an aerial photograph of this area you can see the undulations.

Now imagine a golf course with 1,300 homes and a marina on these relic duns and wetlands. Think of endangered pitcher plants being covered in dirt. Think of all the fill and pollution coming from 1,300 homes and cars and fertilizers and wastewater. Fortunately, that scene never materialized because of involved citizens. Citizens like Mickey Quigley of Friends of Perdido Bay, Jim Veal and Tom Garner of Friends of the Prairie. These people along with all the rest of us, were able to convince the Florida Forever Land Acquisition Program to buy this unique area. We wrote letters to the state. Second graders in the area wrote about the pitcher plant and why it was worth saving. The Navy also was very supportive of the project as it supported its base buffering initiative. The area borders the Navy's Blue Angel Recreation Park. This purchase was a win for Perdido Bay.

In 1994, the proposed Pitcher Plant Prairie parcel consisted of 5,515 acres, multiple owners and a 1993 taxable value of $3,210,940. The land was formally acquired in 1998 and turned over to the Florida park system for public access. There are still more acres to be purchased to bring the total area to 6,880 areas. There are three main trails on the property – a short boardwalk trail down to Tarkiln Bayou where you can see lots of pitcher plants; a longer (6 mile) trail down to Perdido Bay; and a 2-mile loop on the western side of the park which is accessed by crossing Bauer Road. In the Spring, Fall and Winter, it is a great place to hike and walk your dog. In the late Spring, the big red flower of the blooming pitcher plants can be seen. In the Summer, take lots of water if you plan to walk much. We are lucky to have access to hiking trails so close. So, let's thank those individuals who spearheaded this great project – Mickey Quigley, Jim Veal, and Tom Gardner. Thank you.

Fortunately for Perdido Bay, this is not the only watershed area to remain natural. At the mouth of Perdido River, the State of Alabama has purchased most of the Lillian Swamp. A little further up, Alabama owns a lot of land along the Perdido River. On the Florida side, both the Nature Conservancy and the state of Florida own large tracts of land. Because this area never had been heavily developed but was used for growing trees for the paper mill, purchasing the property from landowners was feasible. And let's not forget IP's contribution. They manage a piece of property which also will be preserved. The future of our area looks good.

Manipulation

One advantage of working on a problem so long (we have been trying to get the paper mill to either close or cleanup for 40 years) is that you start to see patterns or explanations for past events. In the early days of our fight, the papermill, then owned by Champion, hired a consultant, Dr. Robert Livingston, who then continued to study Perdido Bay for the next 17 years. His early studies talked about Perdido Bay being a great place for an experiment as it was small and only had one major discharger. So, we waited for the

experiment. We didn't know what the experiment was. It was a slow-moving experiment which we were slow to understand. Here is the story.

In the early 1980's, the EPA discovered the nasty chemical dioxin. It was called "the most dangerous chemical known to man". This was before the "pfos" chemicals were discovered. Dioxin was found coming from papermills which used chlorine for bleaching paper. Dioxin was also found as a contaminate of Agent Orange. Agent Orange was sprayed in huge quantities on the jungles of Vietnam. Dioxin is very slow to degrade so dioxin is still most likely contaminating the soils of Vietnam and we know, from our testing, dioxin is still in the sediments of Perdido Bay. The EPA had to find another bleaching chemical for the paper industry. They settled upon chlorine dioxide. NCASI (the National Council for Air and Stream Improvement) started research to demonstrate that chlorine dioxide was good. Who are NCASI? "The National Council for Air and Stream Improvement, Inc. (NCASI) is a 501 (c)(6) tax-exempt association organized to serve the forest products industry as a center of excellence providing unbiased, scientific research and technical information necessary to achieve the industry's environmental and sustainability goals." The key word in this statement is *unbiased*. The EPA has seldom challenged any science from NCASI. Three studies from NCASI researchers showed that chlorine dioxide did not cause any harm to the environment. According to NCASI, chlorine dioxide was a great chemical!!

Champion International Paper Company who owned the papermill in Cantonment, was a great fan of chlorine dioxide. They went around the country promoting chlorine dioxide and began using chlorine dioxide in 1994. Friends of Perdido Bay was also pulled into the deception, based on Linda Young's analysis. We thought at the time that this chemical was a good substitute for chlorine.

But at the time Champion was switching from chlorine to chlorine dioxide, I was doing research in Perdido Bay studying snails and the food they ate, algae. When Champion switched to chlorine dioxide, suddenly the algae which I was growing in Perdido Bay, stopped growing. This was in 1995. I couldn't see any other difference in Perdido Bay. We had settled the class-action lawsuit and had some extra money for research. With that money, I sampled Elevenmile Creek for chlorine dioxide. On November 28 and 30, I sampled at the Champion outfall into the creek and at the mouth of the creek into Perdido Bay. There it was – chlorine dioxide at both locations measured at the same concentration – 0.4 mg/L. Even more surprising was the presence of chlorate, a potent herbicide. This data is on our website homepage; www.friendsofperdidobay.com. I was shocked. Maybe the presence of seagrasses with red fronds could also be explained by the herbicide, chlorate. I wrote the EPA . They said I was wrong.

During these years, the papermill consultant, Dr. Livingston, was claiming that over nutrification was causing harmful algae blooms in Perdido Bay. Do you remember the harmful algae*, Heterosigma akashiwo* ? That was the culprit killing Perdido Bay because there were too many nutrients in Perdido Bay. Note: our plankton analysis has never found any *Heterosigma*. This was a prevailing theme in those days. Too many nutrients causing hazardous algae blooms. Chesapeake Bay had its own toxic algae blooms of Pfiesteria which only seemed to occur in these years of "too many nutrients". In 2001, Dr. Livingston

published his theory of too many nutrients in a book "Eutrophication Processes in Coastal Systems". This was a very useful theory for the paper industry who were always trying to explain where that black goo on the bottom of Perdido Bay came from. According to the paper industry, that black goo did NOT come from their **10,000** pounds per day of biosolids they were allowed to dump into Perdido Bay every day. That black goo came from plankton blooms and it caused oxygen depletion in Perdido Bay! Oxygen depletion had been one of Friends of Perdido Bay's concern. So how do you get rid of too many nutrients? Wetland treatment was one treatment proposed for Champion. Champion built an experimental wetland treatment system and invited Friends of Perdido Bay's Board to come see it. We went and told Champion paper company they were doing a great job. But they never built a full-scale system. As the end of the 1990's approached, Upper Perdido Bay became ingulfed with algae. It covered our crab traps, washed ashore in massive waves. No one could argue that "too many nutrients" was not a problem. But the fronds on grasses growing in Upper Perdido Bay were still red. I had given up my snail studies and growing algae.

Fast forward to today. We have no algae, no grassbeds, and the plankton we have blooming in is "trash" and not suitable for maintaining a healthy balance of fish. Does this mean that the papermill has "cleanup"? What it means is that the papermill is no longer dumping nutrients, especially phosphate, into Perdido Bay to make us believe that nutrients are the problem. The real problem is the chemical chlorine dioxide and its break down products, one being the herbicide, chlorate. What has become obvious is that the "too many nutrients" theory was being used to hide the problems caused by this bleaching chemical, chlorine dioxide, and to also try and hide the damages from the large amounts of biosolids being dumped into the bay. The black goo on the bottom of Perdido Bay is coming from phytoplankton blooms AND the biosolids dumped by the papermill. We know that because of the dioxin and heavy metals which are found in this goo.

But the paper industry really loves this bleaching chemical, chlorine dioxide, because it reverses the effects of these biosolids. One of the breakdown products of chlorine dioxide is **oxygen.** How perfect is that! Chlorine dioxide produces oxygen under alkaline conditions which is why International Paper must add the effluent from the wet alkaline scrubbers to Perdido Bay. It all makes sense now. This was the experiment.

There is a new book telling this story. It is called **"Manipulation"**

Membership and Renewals

Tidings is published six times a year by Friends of Perdido Bay and is mailed to members. To keep up with the latest news of happenings on Perdido Bay, become a member or renew your membership. For present members, your date for renewal is printed on your mailing label.

Membership is $30.00 per **year per voting member**. To join or renew, fill out the coupon to the right and mail with your check to the address on the front.

Friends is a not-for-profit corporation, and all contributions are tax-deductible. Funds received are all used for projects to improve Perdido Bay. No money is paid to the Board of Directors, all of whom volunteer their time and effort.

New

Renewal

Amt Enclosed $_____

_____

Name

_____

Address

Phone (_____)_____

email

Phone ( )