The meeting in Port Aransas on May 4 was a success with really great presentations. Two significant pieces of information were forthcoming. Although the information was in the notes from the meeting, the information needs to be emphasized again.

The first issue involves the Open Beaches Act where “the public shall have the free and unrestricted right of ingress and egress to the larger area extending from the line of mean low tide to the line of vegetation bordering on the Gulf of Mexico”. The Open Beaches Act was challenged by a property owner on West Galveston Island after Hurricane Rita made the property on the public beach and the State asked for it to be removed. The property owner, Carol Severance, filed a lawsuit to defend private property rights in opposition to the Open Beaches Act. Normally, if the beach migrated onto private property, the State would ask for removal of a structure. However, in the Severance Case, the Texas Supreme Court basically stated the State cannot seize the property as a result of a storm event. They went on to say that on a natural eroding beach the State can seize the property provided they show historical data that the public beach was used for recreation, fishing, etc. Currently, this decision applies only for West Galveston Island, not the entire coast, but it will be only a matter of time before other coastal areas will address the issue.

As far as rules and regulations for beaches and dunes and public access, the GLO continues business-as-usual and public beach access requirements and building standards still apply. The Open Beaches Act was based on a continuous rolling easement, which is not the situation with the Severance Case. Public beach easements can still be obtained through prescription and/or expressed dedication, but without public beach easements, there are unlikely to be any state-funded projects along West Galveston Island. The continuation of beach maintenance activities is in question because public funds are unlikely to be spent for cleaning beaches that are considered private. In the future, government-funded post-hurricane cleanup efforts now may be restricted or limited. It’s a real mess and a whole new learning curve for the GLO and West Galveston Island.

The second issue involves the American Wetlands Foundation “Blue Ribbon Resilient Community Forum.” American Wetlands is teaming up with the GLO to help Texas package a stronger message for state-wide support of coastal

(Continued page 2)
issues. One of the largest hurdles is too much conflicting regulation and red tape at the federal level, which inhibits cost-effective and timely implementation of coastal restoration efforts. The Gulf States are being branded as “America’s Energy Coast,” which include Florida, Alabama, Mississippi, Louisiana, and Texas. The Foundation has been conducting “Blue Ribbon Resiliency Community” events to make people aware of the problems with the Gulf Coast using the phrase “Envisioning the Future of America’s Energy Coast.” Protecting the wetlands is a key component of the program. It was mentioned that the U.S. Inter-coastal waterways will be gone in 30 years unless something is done to stabilize the structures. One of the main purposes of the organization is to raise public awareness of the impact coastal degradation has on the state, nation, and world and to gain support for efforts to conserve and sustain economic, community, and ecological assets of the Gulf Coast. The TGLO has helped the organization focus attention on the Texas coast. Texas needs to become more involved with the Foundation because two states, Mississippi and Louisiana, are professionals in obtaining funds from Washington, and we can ride on their coat tails so to speak.

We discussed at the meeting the need for the Texas ASBPA Chapter to engage the Texas Municipal League, whose main purpose is “to render services which individual cities have neither time, money nor strength to do alone.” We certainly could use their help on coastal legislative issues in Austin and we will endeavor to bring the Texas Municipal League to our meetings to see where we can work together.

The next meeting is August 17 in Galveston and the key note speaker is Colonel Leonard Waterworth, Executive Director of the Port of Houston. In addition, we will see what is necessary to thwart the purported increases coming for windstorm insurance during the upcoming legislative session. There is a new insurance commissioner who is considering territorial rates and changing the distinction from 14 counties to 33 counties. This new designation will certainly affect coastal cities and the increases could be significant for private and commercial property. The Texas Windstorm Insurance Association (TWIA) needs 47% more funds and there is a planned increase already for January 1 of 5% and they need another 42% increase. Besides the Texas Chapter, coastal communities, Chamber of Commerce’s and other organizations need to band together for a coastal windstorm caucus during the legislative session for a unified effort to stop any rate increases.

Thank you all for your support and please encourage your colleagues, friends, and interested parties to join the American Shore and Beach Preservation Association and become a part of the Texas ASBPA Chapter. Hope to see everyone at the August 17 meeting in Galveston

Jerry Mohn
President

Panoramic Oblique aerial photography of Bolivar Marsh Along the Intercoastal Waterway.
Halfmoon Reef Restoration

By Paul Jensen and Dave Buzan, Atkins; Mark Dumesnil and Tammy Brooks, The Nature Conservancy

The Nature Conservancy (TNC) has a major world-wide effort underway to restore critical ecosystems. There is now substantial quantification that more than 85% of the world’s oyster reefs have been completely lost. In most bays around the world, shellfish reefs are at less than 10% of their original abundance. Oyster habitats are now more endangered than seagrasses, coral reefs, and mangroves. A key point in TNC’s efforts is the recognition that oyster reefs are not monocultures but rather habitats for a wide range of estuarine life. TNC is attempting to counter the loss of oyster reefs with a variety of restoration projects. In Texas, it is focused on restoring that full reef ecosystem function to Matagorda Bay. TNC’s goal is to create a reef where the Halfmoon Reef (HMR) oyster reef once covered over 400 acres of bay bottom south of Palacios.

TNC worked with local resource agencies and environmental organizations to identify Halfmoon Reef as a prime candidate for restoration. The reasons include its documented history as being a major productive oyster reef, and the changes in Matagorda Bay that have returned much of the potential for oyster production. This article briefly reviews the history and then describes the approach taken to design a restoration program to support the full reef ecosystem.

Halfmoon History

HMR was a major feature in Matagorda Bay. In 1858, not long after Texas joined the Union and just before the Civil War, the federal government built a major lighthouse at the end of HMR to warn and protect shipping. A major oyster reef survey by the U.S. Bureau of Fisheries in 1905 documented high productivity and the fact that the reef was exposed at low tide. The reef probably continued to be highly productive for some time but changes occurred. In 1936 work was completed on a dredging project that allowed the Colorado River flow to go directly to the Gulf, removing a major source of nutrients and freshwater from Matagorda Bay. Perhaps the biggest change, the physical destruction of the reef, is not well documented. It is theorized that the drought of the 1950s, combined with flow regulation and diversion of the Colorado River flow to the Gulf may have decimated the oyster population, allowing it to be leased for oyster shell dredging. The two versions of NOAA Chart 11317 (Figure 2), with radically different bathymetry, suggest that it was excavated for building material, probably in the 1950s or 1960s. The survey data shown in the 1975 chart is undoubtedly older, but we have not been able to identify when that survey was conducted.

But the history has not been all bad. By 1992 work was completed on diverting the flow of the Colorado River back into Matagorda Bay. As part of that work, the USACE built oyster reefs (building Sammy’s and add-
Horseshoe Crabs: True Survivors

Horseshoe crabs are known as “living fossils” because they have survived on Earth for more than 450 million years. Although they have evolved in small ways over the millennia, they haven’t changed nearly as much as the world around them. Over the years, horseshoe crabs have seen the rise and fall of the dinosaurs, lived through the rise of the mammals and survived three major extinctions, including a huge one 250 million years ago that wiped out about 96% of marine creatures and 70% of large land animals.

So how have horseshoe crabs managed to succeed? Quite simply, these creatures can put up with a lot. A creature that survives that long can’t be choosy, looking for the perfect meal and perfect bed. These “crabs” – which are actually more closely related to spiders, ticks and scorpions – can eat just about any kind of organic matter, from mollusks to algae. They can even go without food for up to a year. They’re also not exactly picky about where they live, being able to tolerate a wide range of salt levels and low levels of oxygen in the water.

But horseshoe crabs are neither indestructible nor immortal, and their biggest modern threat comes from humans. Their numbers have decreased dramatically the past 20 years as habitats dwindled and fisherman used them for bait. Now, conservation efforts have started to reverse that trend with stricter regulations and quotas on harvesting them for bait and by creating horseshoe crab reserves and sanctuaries for spawning. So, perhaps these survivors will be around another 400 million years.

Letter From the Editors

Howdy, coastal community. Welcome to the Summer - 2012 edition of The Strand Line, the Texas Shore and Beach Preservation Association newsletter. As always, we want to thank our contributing authors for the service they provide to the community. We greatly appreciate the work and effort everyone puts into publishing the newsletter.

There is a specific issue we will continue to bring to the forefront of everyone’s minds as we move further into 2012. We would like all members to consider volunteering for one of the many committees that make the Texas Chapter of the ASBPA a valuable resource for everyone. There are many roles to play and much work required to make this a great organization. To find out what committees are available, read through the Meeting Agenda, look through the website, read past editions of The Strand Line, and/or speak with any committee member or board member. Find an area that interests you (membership, legislature, technical, communications, etc.), and then contact someone on the committee. Many hands make quick work.

As always, we want to encourage everyone to submit articles to the newsletter relating to your personal interests, professional projects, or general commentary regarding the coastal community. If you have ideas for an article, please submit them. It is a group effort to provide content necessary to make the newsletter interesting and relevant. We look forward to reading your article submission.

Regards-

Cris Weber, Newsletter Committee Co-Chair
cweber@ljaengineering.com

Jayne McClure, Newsletter Committee Co-Chair
jdmcclure@gba-inc.com

BE HEARD, BE PUBLISHED!
The TxASBPA Newsletter staff challenge our readers to submit articles for publication.

GUIDELINES:

- 500 to 1000 word articles (pictures welcomed)
- Word format (Garamond @ 10 font)
- Ensure permission to publish is granted.
Texas Chapter of the ASBPA — Membership

By John Lee, Coastal Strategies Group, LLC

Things are happening in Texas! The Texas Chapter of ASBPA has the largest, most active and involved membership of any chapter in the national association. Our members serve on committees, volunteer their valuable time and help sponsor local and national events. In October 2013, the National Technical Conference will be held in South Padre. The last time this conference was in Texas it was in Galveston in 2007. That conference turned out to be the most successful conference ASBPA had ever held, surpassed only recently by the New Orleans conference in 2011. I’m confident our membership will join together again in 2013 and make the South Padre conference one we will all remember for years to come. But, attending a high quality conference is only one of the many benefits of membership in ASBPA and by extension the Texas Chapter (for those of us lucky enough to live in Texas).

Direct benefits include discounted lodging and registration rates for the Technical Conference and the Washington DC Coastal Summit, the “Coastal Voice” monthly e-newsletter, and most notably a copy of the peer reviewed technical journal Shore & Beach, currently in its 80th year of publication. Other benefits include networking with individuals from around the world who share your concern and love for our coastal environment. But perhaps most importantly, the concept of membership itself plays a larger role in everything we do as an Association and Chapter. Our combined membership brings our association together; individually each of us has distinct talents and abilities; and collectively, we have an unparalleled level of knowledge and experience. The diversity of our membership brings our association and chapter its strength.

Our membership effort dictates our future; we can only grow as we bring our association into new areas, and continue to seek new members, while still engaging our existing members. This is a big task, and to be successful, it cannot fall to just a select few. It takes a special effort to reach out to a new person or a different group. Each member of the association / chapter can help by being prepared to give a brief “elevator speech”, (nothing more than 15 seconds) explaining why it is important to belong to ASBPA, and that, combined with the right amount of initiative when a special opportunity comes along, will go a long way to cultivating new members.

By helping to develop student chapters, ASBPA is working to bridge the gap between the experienced members of our association and profession with those young professionals just beginning their careers. The Stevens Institute of Technology in New Jersey has formed the first student chapter of ASBPA, and efforts are underway at universities across the country to replicate this process. The Texas Chapter should consider additional outreach and work toward helping a student chapter develop at one (or more) of the universities here in Texas. It is easy to envision an A&M Chapter with satellites in Galveston and Corpus Christi, and a UT Chapter.

As members we should also be bringing the message of our organization to those industry groups who provide services in the coastal area including hotels, motels, real estate associations, convention and visitor bureaus, restaurants and other destination marketing entities. Many hotel and restaurant chains focus their market selection on building in areas adjacent to beaches, directly benefitting from the efforts of ASBPA. What would happen to that business if the beach were gone?

Since its founding in 1926 ASBPA has advocated for the integration of science into public policy decision making, and the committee structure within ASBPA reinforces this approach. Standing committees of ASBPA include the Science and Technology (S&T) Committee, the Government Affairs (GA) committee and the Membership committee. Each of these committees is linked; and requires the active participation of the other to be successful. As our membership grows, so do our legislative needs, and their technical complexity. Our strength is in the diversity of our membership; however, it is up to us to work together and bring about the successful future we envision for the Texas Chapter and ASBPA.

The Texas Chapter will be only as strong as we make it together.
Halfmoon Reef Restoration (cont’d)

The first step in the restoration process was conducting a comprehensive survey of the site to document sediments and potential concerns such as pipelines and wrecks. The surveys confirmed that the site had a hard bottom, consistent with its former role of supporting a substantial oyster reef, and that there were no significant constraints to reef restoration.

Another step involved performing current measurements in cooperation with the Texas Water Development Board and placing test substrates at the site to assess potential for oyster colonization. As can be seen in Figure 3, oyster colonization was good. This is encouraging since it occurred in the summer of 2011, a particularly dry year. Within a month of deploying the test substrates of limestone, concrete rubble, and oyster shell, all substrates had oyster spat colonizing them, although the salinity in the area was about 29 practical salinity units (psu). Six months after deployment, most of the test substrates were covered with live and dead oysters. Although the test indicated hard substrates could be colonized by oysters when salinities ranged from 29 to 32 psu, the goal of this project is not to just restore oysters. The goal of the project is to simulate the diversity of habitat provided by oyster reefs. This reef complex will support a diverse assemblage of marine and estuarine organisms even if it does not always support oysters.

The design process included determining a series of objectives for size, habitat maximization and diversity, stability, minimizing potential for sedimentation, and cost minimization. Each design objective was analyzed independently and then combined with others to achieve as much as possible for each of the design objectives. The end of the design process yielded a set of rows of either limestone or concrete rubble (Figure 4). The material will have a principal dimension ranging from 2 feet to 2 inches, with a median size of 1 foot. This size distribution was selected to maximize habitat availability and diversity. The material would be placed in rows across the axis of the former location. Each row would be 650 feet in length, with a design height over the bottom of 3 feet and a width of 18 feet. For reasons of habitat diversity, rows are separated by varying distances. The design figure shows both base and optional row sections. As bid prices become available, TNC would contract for enough optional sections to use available funds.

Another design constraint accepted in the permitting process was for a minimum water depth. While HMR was historically very shallow (charted depth of 1 foot and reported to be exposed at low tide), it was requested that a minimum depth of 2 feet be maintained. This will restrict the height in some locations but should not be a major constraint.

It should be emphasized that the goal of the project is not to simply build a pad of oyster shells that would be suitable for commercial harvesting, but rather to build a reef that maximizes habitat for a wide range of organisms. TNC is requesting a ban on commercial oyster harvesting for at least 5 years while the reef becomes established. Over time it is hoped that the rows of hard substrate will each become colonized with oysters, mussels, and other attaching organisms and gradually merge. It may take many decades to restore the reef to its prior condition, but that is the ultimate goal for the project by TNC and Atkins.
ASBPA 2013 Conference in South Padre Island, TX

By Cameron Perry, HDR Engineering, Inc.

I’m excited to announce that the ASBPA National Coastal Conference will be returning to Texas in October 2013, and South Padre Island will be the hosts! Also, we are happy to have the General Land Office as an organizational co-sponsor. Their participation is a key component to a successful event. As a result, the ASBPA board members are looking forward to returning to Texas, especially after the hugely successful conference in Galveston in 2007. This means it is up to us in the Texas Chapter to make sure that next year’s conference is just as good or better!

Planning for the conference will start up soon after this year’s conference in San Diego wraps up, with a big push starting after the New Year. The conference co-chairs (JoAnn Evans, Reuben Trevino, and myself) will be looking towards Texas membership to help fill key roles on various committees. Local insight and knowledge play a crucial part in the success of any conference. Committees that will need volunteers include:

- Steering
- Sponsorship
- Papers/Presentations
- Field Trip

Texas members on the sponsorship committee are especially important as we know the local industries and suppliers that would like to be a part of the event. These conferences are the main fundraisers for the organization, and I’m proud to say that the 2007 Texas conference has the record for most sponsorships raised in ASBPA history. I think we can top that!

I encourage our Texas members to participate and also to attend the upcoming conference in San Diego (October 10-12) in order to get a feel for how the conference is structured. These are great events that serve as educational and networking tools for scientists, engineers, educators, and public sector staff and officials. If you’d like to be a part of the 2013 conference, please contact JoAnn, Reuben (rtrevino@myspi.org), or me (cameron.perry@hdrinc.com).

Also, even if you’re not serving on a committee, we’ll need great presentations, so start thinking of topics and planning to attend next October.

South Padre Island Beaches Among the Cleanest in Texas

By Reuben Treviño, Coastal Resources Manager, City of South Padre Island

In a recent article from USA Today, South Padre Island was listed as one of the top destinations of the country for their beach water cleanliness. Also according to the article, South Padre Island earned a five-star rating for following best practices of testing water quality more than once a week.

The water quality of the South Padre Island beaches maintained a medium to low rating of bacteria levels making them some of the cleanest beaches to swim according to the Texas Beach Watch Program funded by the U.S. Environmental Protection Agency (EPA) and the Texas General Land Office (GLO).

The sampling and testing is locally performed through the UT-Pan American Coastal Studies Lab. The water quality conditions at beaches being sampled under the Texas Beach Watch Program can be obtained through the interactive map found at www.TexasBeachWatch.com.

For more information please contact Coastal Resources Manager, Reuben Treviño at (956) 761-3035 or at RTrevino@MySPI.org.
Texas Beaches & Waterways - Photographs

BREAK OUT YOUR DIGITAL CAMERAS! It’s time to tap into your inner Picasso and find the picture that is worth a thousand words and share it with our friends that read The Strand Line. We would like to start including pictures from our members in the Newsletter of places and faces on our Texas Beaches. You may send your pictures via email to any of the newsletter committee members. We look forward to the individual perspectives that make our coastline beautiful and show our readers the diversity that makes our beaches special. Please enjoy these recently submitted photographs of the Texas coast.

West End of the Seawall in Galveston
Allison Buchtien (Jan. 2012)

Close to Pirates Cove in Galveston
Debbi Danford (Jul. 2011)

Port Bolivar
Hazel Meaux (Jun. 2012)

Upcoming Events, 2011

- **Texas Chapter of the ASBPA. Friday, August 17, 2012. Galveston Island, TX.**
  
  More information at: [www.galvbay.org/events_redfish.html](http://www.galvbay.org/events_redfish.html)
- American Geophysical Union, Fall Meeting. December 6-10. San Francisco, CA.
Texas Chapter of the ASBPA – Annual Meeting Agenda

Date: August 17, 2012
Time: 11:30 AM
Location: Galveston Island Convention Center, 5600 Seawall Blvd—Galleon Room

Host:

- City of Galveston

Lunch Sponsor:

- Callan Marine, LTD, http://www.callanmarineltd.com

Agenda

Meeting begins 11:30 AM

- Jerry Mohn - Call meeting to order.
- Introduce Elected Officials, Board of Directors, and Sponsors

Welcome:

- City Manager—Michael Kovacs
- Chairman Parks Board—Dr. Craig Brown

Presentations:

- Colonel Leonard Waterworth, Executive Director Port of Houston
- Otie Zapp – President Coastal Windstorm Insurance Coalition (CWIC)
- Technical Committee – Co Chairs Marisa Weber and Owen Parker
- Sargassum Early Advisory System – Captain Robert Webster

Updates:

- Legislative Committee: Marie Robb
  - Developing the Texas Legislative Agenda for 2013 Session
- Membership Committee: – John Lee
- Education/Communication: Chair Jayne McClure and Cris Weber
  - Newsletter
  - Website: www.texasasbpa.org
  - ASBPA - Cameron Perry - San Diego Conference

Next Texas Chapter Meeting: December?

Adjournment
The American Shore & Beach Preservation Association recognizes that the shores, beaches and other coastal resources of America provide important quality-of-life assets within the reach of the largest possible number of people in accordance with the ideals of a democratic nation. This Association is dedicated to preserving, protecting and enhancing the beaches, shores and other coastal resources of America.

The Texas Chapter of ASBPA is dedicated to fulfilling this mission in the State of Texas. We are a member based advocacy organization. For more information on becoming a member, becoming a corporate sponsor, or becoming more active with the organization, please contact Jerry Mohn at the address to the left.

Please remember to visit our website at www.texasasbpa.org for more frequent updates on coastal happenings and the Texas Chapter of ASBPA. If you have information to submit for the website or newsletter please contact Jerry Mohn.

Corporate Sponsorship costs $500 and provides for recognition on Chapter website and all publications & events.

Corporate Sponsors

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