

**GK-12 Summer Field Science Program  
(for students entering grades 5-8)**

**Sponsors: UTMSI GK-12, Port Aransas ISD, and the City of Port  
Aransas Parks and Recreation  
Schedule (updated 6/012/09)\***

**Master Teachers: Julie Findley (PAISD) and Cliff Strain (FBISD)**  
*Thank you to our Co-Sponsors: Coastal Bend Bays and Estuaries Program, Port  
Aransas Boatmen and Port Aransas Kiwanis*

**Week 1:** 6/15/09 - 6/19/09 8:30 AM - 1:00 PM

**Topic:** Tracing a Drop of Water Inland to the Coast

**Teachers:** Julie Findley, Cliff Strain

**Teaching Assistants:** Christi Borski

**GK-12 Fellows:** Chris Wilson, Geoff Hensgen, George Adams

<b>Date</b>	<b>Subject</b>	<b>Activity</b>	<b>Lab</b>	<b>Scientist</b>
6/15/09	Riparian Wetlands: The Rivers that Feed the Bays	Walking tour and activities at Fennessey Ranch to explore a riparian (freshwater) ecosystem	No Lab	Sally Crofut and Dr. Liz Smith
6/16/09	Shallow Bays and Seagrass Beds (Estes Flats)	Boat trip to Estes Flats: seining, coring, and exploration of grass beds; collection of sea grass samples	Build salt water aquarium for live creatures collected in the field and use microscopes to identify organisms	Jay Tarkington
6/17/09	Seaweeds are Algae!!	<i>*Meet at Visitor Center UTMSI</i> Jetty collection of seaweeds and observe microscopic algae; ARK Tour	Learn how to press and identify seaweeds and discuss importance of these plants; press plant samples	Dr. Ken Dunton
6/18/09	Island Salt Marshes	Guided tour of salt marsh (Corpus Christi Pass), including the plants and critters that in this productive ecosystem. Marsh ecology and animal & plant adaptations; seine	Identify marsh plants and animals, talk by Beth on birds of marshes	Beth Hoekje
6/19/09	Organisms and Adaptations	Discuss adaptations of organisms in the bays and estuaries; Coast Guard tour	Sting rays; dissection of dogfish sharks; bull shark behavior and shark senses	Dr. Andy Evans Kyle Morford, US Coast Guard

\*Schedule subject to change due to unforeseeable events. Check website for updates.

*For additional information: Contact Flora Buerger, Program Coordinator  
([flora.buerger@mail.utexas.edu](mailto:flora.buerger@mail.utexas.edu))*

**Week 2:** 6/22/09 – 6/26/09 8:30 AM - 1:00PM

**Topic:** Tracing a Drop of Water Inland to the Coast - Life Aquatic!

**Teaching Assistants:** Christi Borski, Karen Bishop

**GK-12 Fellows:** Chris Wilson, George Adams, Geoff Hensgen

<b>Date</b>	<b>Subject</b>	<b>Activity</b>	<b>Lab</b>	<b>Scientist</b>
6/22/09	Human Impact on the Bay	Tour of birding center and; wastewater treatment plant; birds and how to identify in the field; Wetlands Education Center	Discuss freshwater influences and the effects of human activities on our estuaries; Protists lab	Nan Dietert Reta Pearson
6/23/09	Plankton: “Just a Stage They’re Going Through”	<i>*Meet at UTMSI Marina</i> R/V Katy trip for trawling and plankton tows. Save samples for lab analysis and aquarium; water column measurements (temp, salinity, DO, current, and light); trawl and sediment grabs; back bay for plankton sampling and benthic trawls (examine samples for arthropods and observe movements in/out of the water)	Talk by Brad on the diversity and importance of plankton; show bioluminescence; identify plankton and preserve samples; add live animals to aquarium; remove a carapace on a blue crab and relate body parts to shrimp	John Williams and Brad Gemmell
6/24/09	Stressing out in Tidepools and Those Sping Guys	<i>*Meet at Pier Lab UTMSI</i> Jetty collection of sea urchins, sea squirts, sponges, and corals by graduate fellows; tour aquariums at UTMSI	Examine specimens from fouling plates hung off pier lab under a microscope; observe echinoderm samples for movement of tube feet/mouth; grouping of animals; dissection of a sea star; examine sea urchin test and internal parts	Rick Kalke
6/25/09	Benthic Ecology and Chemistry	Kayaking at Lighthouse Trails; core sampling, seining, snorkel if time permits <i>*Bring change of clothes</i>	Separate and identify species and groups for saltwater aquarium	Cliff Strain
6/26/09	Life on Our Bay Bottoms	Beach seine (separate vertebrate and invertebrate specimens); Discussion, continue to build saltwater aquarium	Talk by Deana on adaptations of plankton; Plankton Race; dissection of a squid; build your own saltwater aquarium; squid prints if time permits	Dr. Deana Erdner

*For additional information: Contact Flora Buerger, Program Coordinator  
([flora.buerger@mail.utexas.edu](mailto:flora.buerger@mail.utexas.edu))*

**Week 3:** 7/06/09 – 7/10/09 8:30 AM - 1:00 PM

**Topic:** Tracing a Drop of Water Inland to the Coast - Our Beaches and Bays

**Teaching Assistants:** Christi Borski

**GK-12 Fellows:** Chris Wilson, Geoff Hensgen, George Adams

<b>Date</b>	<b>Subject</b>	<b>Activity</b>	<b>Lab</b>	<b>Scientist</b>
7/06/09	What is a Delta and why are they important?	Exploration of the McGregor Ranch and Nueces River Delta; & the importance of river deltas and fresh water inflows to bay system; cast animal tracks; earth-caching; adaptations of delta species; chemical/physical weathering	In the field all day-no lab	Lari Jo Johnston
7/07/09	Our Bays and Estuaries	M/V Mustang Dolphin Watch on south CC Bay/Shamrock Island to sample beach/bay water quality;	Dissection of a crayfish (Body Part Bingo);	Cliff Strain
7/8/09	Geology of the Gulf of Mexico	Talk by petroleum geologist; boat ride on Coco Mialjo; examine boat electronics (radar, GPS, fishing); using electronics and geologic data for fishing	Examine sediment samples and relate geology to formations of the bottom of the Gulf of Mexico	Mike Lucente
7/9/09	Aquaculture: A Gulf Coast Fish Hatchery	Tour CCA/CPL Marine Development Center (Red Drum & Spotted Sea Trout hatchery) and participate in “Kidfish” event	In the field all day-no lab	TPWD Scientist
7/10/09	St. Joe’s: A “Natural” Beach	<i>*Meet at Fisherman’s Wharf</i> Jetty Boat to St. Joe’s; Students split into groups for walking tours with Tony (debris and bird life) , John (ID/discuss beach and dune plants), and seining and benthic coring; shorebird identification	Examine nautical chart of Aransas Pass; short talk on beach erosion by Tony; Identify and calculate relative abundance of specimens	Dr. John Fucik and Tony Amos

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