

Mission-Aransas NERR Plant Survey, Fennessey Ranch

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Photos by Kiersten Madden, Mission-Aransas NERR

If you attended the Chapter meeting on Saturday, February 14th, 2009, you learned about the Mission-Aransas NERR. Briefly, for those who were not in attendance, NERR stands for "National Estuarine Research Reserve." There are about thirty such reserves designated by the federal government around the coast of the U.S. The NERR System is a network of designated areas established for long-term research, education, and stewardship. See <http://www.nerrs.noaa.gov/> for more information. This partnership program between NOAA and various states protects more than one million acres of estuarine land and water that provides essential habitat for wildlife; offers educational opportunities for students, teachers and the public; and serves as living laboratories for scientists. Our local Mission-Aransas NERR—the only one in Texas—was established in 2008 and headquartered at the UT Marine Science Institute in Port Aransas. The Mission-Aransas NERR includes Copano, Mission, and Aransas Bays plus portions of ANWR and the Fennessey Ranch. You'll remember Fennessey Ranch from the training session with Liz Smith on Riparian Ecology.

Part of the mission is to establish "base-line" data for all portions of the reserve. One of the base-lines is data on flora found on the land portion of the reserve at 50 specific sites. With the staff of the Mission-Aransas NERR being ocean scientists, it was necessary to find someone to identify the plants found. If you want to identify South Texas plants, you won't find anyone more knowledgeable than our own Ernie Edmundson. Ernie has a passion for native plants and has spent years learning about and creating a native plant database for our area. In addition to Ernie, add Kris (our invasive plant specialist) and Ray Kirkwood, Frankie Fox, and yours truly. My function in the group is to say, "What's this?"

Thus on February 12 and 13, 2008, Ernie, Ray, Kris, Frankie, and I traveled to Fennessey Ranch to continue the survey. Ernie, Ray, and Kris began the previous November. Directing the survey is Kiersten Madden, Stewardship Coordinator for the NERR and her able assistant Sam (as in Samantha). Not scientifically trained, I refrained from asking why we are doing a plant survey at a time when most of the plants have bare branches.



Our transportation was an open Swiss-made vehicle purchased second-hand by Fennessey and ideal for slogging around a ranch. Our guide and driver on the survey was Mog. Without his knowledge of the ranch and skillful driving, we would have been unable to find the survey points. He first took us to see Fennessey's nesting pair of bald eagles and their two chicks. The nest perched on the top of an electric transmission tower was easy to see. Both chicks were clearly visible, pestering mom and dad for food.

As pleasing as it was to watch eagles and their offspring, it was time to go to work. Once we reached the vicinity of a survey point, everyone looked for the white PVC marker. After someone hollered "There it is!" we would pile out of the vehicle to begin the survey.



Simply stated, we tried to identify every plant within fifteen feet of the survey point. Easy enough, right? First, we would look at the big plants (that's trees). Remember that this is February and in many cases there are only bare branches. So we studied the branch patterns, bark and—this being South Texas—the arrangement and size of the thorns. In one case, we identified a

native pecan tree by kicking through the leaf litter until we found pecans. For those trees with leaves, the process was much easier.

Next we studied the smaller woody plants, or understory. It's the same scenario again. Look at bare branches and thorns and try to put a name to the plant. Now we move to forbs. That's more difficult. There are so many. Grasses are next; all look dead with only a few stripped-out seed heads. Finally, we part the dead grass to reveal the low growing plants hiding there. Things like "frog fruit." Some survey spots are easy with only grasses and few of them. Others are in wet areas and in some cases include standing water. At these, Kiersten dons galoshes and wades out to gather plants for identification.



In most cases, we look to Ernie for confirmation of our opinions. Kris and Ray can identify many of the plants. Frankie can describe plants from her hours spent on the computer. I try to look like I know something. Kiersten is the record keeper. I'm not sure how she records those "maybe it's a" identifications. After two full days we have surveyed the 30-foot-diameter area surrounding 18 survey points.

Kiersten has scheduled the next session for the first part of May. With any luck, there will be flowers and leaves next to the thorns.