



## Enhancing the Shoreline - One Home at a Time

by Mike and Ann Chengrian

Waves and currents move swiftly into our Lake Keowee cove and, failing to negotiate the cove's dogleg left, beat against our waterfront property. Rebounding off our 1982 vintage railroad tie bulkhead, the action long continued to reverberate throughout the cove. Suspended silt and flotsam, deposited in front of the wall, built up a sizable beach. Reeds, rushes and other volunteer marsh and aquatic plants populate this beach along with daily deposits of plastic bottles, bags and an occasional aquatic toy.

A felled tree butt peeking out in low water and the tree's protruding branches provide perches for fishing birds and sunning turtles. The tree also regularly attracts wading birds and bass fishermen. A Great Blue Heron frequently uses the roof and ramp of our dock as a platform for his hunt. While pleased with the fauna and flora this waterfront attracts, we found the creosote soaked bulkhead both visually and environmentally disagreeable, and vowed to replace it.

In February, we interviewed several companies and asked Brezeale Shoreline Erosion Control of Pickens, to submit a proposal. Our agreement specified steps to preserve and enhance the native vegetation, mitigate both erosion and the rebound effect by replacing the bulkhead wall and provide wildlife habitat. Removing several rows of rail ties, lining the remainder with heavy erosion mat and covering it all with granite rip rapping, would act to absorb wave action, releasing its energy in a variety of directions and provide a durable natural appearance.



Before, work scope



Before, rail tie bulkhead, beach and volunteer plantings



Bucket removing ties

At both the crest and base of the rip rap, new plantings of native species were specified by consulting horticulturalist, Michael Dorn, to enhance the natural landscape. Brezeale also agreed to move the fallen tree closer to shore so its butt wildlife roost protrudes even at full pond, while preserving its sub-surface fish habitat and protruding limbs.

In April, 2009, we collaborated on permit applications to both Keowee-Key and Duke Energy Lake Services. Using a full service company with their experience and reputation eased the paperwork and process. Timely on-site inspections by both Keowee-Key and Duke's Lake Services Representative enabled full project approval by late July.

Frank and Eric Brezeale, their barge loaded with stone and other materials, and a huge steam shovel arrived a few days later. The majority of work was completed in two days, leaving the property greatly improved and requiring only occasional watering to establish our new plants.



Erosion mat fabric goes down first, then rock



The bucket lays down rock and washes it



Project completed with plantings above the rock