## What in the World is the Corte Madera Creek Watershed?

Carole d'Alessio

2001

Off the eastern flanks of eastern Mt. Tamalpais, from Carson Ridge, Loma Alta, White's Hill, and the Sleepy Hollow Divide, rainwater is funneled to the basin below. From these ridge-tops, rain flows down 42 miles of creeks, and traverses 28 square miles of watershed before it spills into the bay at the mouth of Corte Madera Creek near the Larkspur Ferry Terminal.

In all there are 27 named creeks. The two major upstream branches of the creek are Fairfax Creek and San Anselmo Creek. After they join, the stream is known as San Anselmo Creek until it reaches Ross, where it is renamed Corte Madera Creek.

In addition to there being extensive streams, there is one lake. Phoenix Lake was constructed in 1905 and was part of the system that Marin Municipal Water District purchased in 1912 from Marin Water and Power Company. Although not used today to provide drinking water, its capacity is enough to supply approximately 1230 families with water for a year.

The watershed reaches from sea level to an elevation of 2,571 feet at the East Peak of Mount Tamalpais. In the lower reaches of the watershed, a narrow floodplain merges with the tidal marshes and mudflats that surround San Francisco Bay between San Quentin and the Tiburon Peninsula. In the less inhabited upper reaches, lands are mostly owned by MMWD, and San Anselmo and Marin County Open Space districts.

Historically the watershed's creeksides and valley floor were occupied by Coast Miwok people during a period beginning at least 3,600 years ago; their predominance ended about 200 years ago with the arrival of the Spanish. At least seventeen Miwok archeological sites have been found along the creek. Professor Betty Goerke and her students report on these sites in the book Uncovering the Past at College of Marin (1994) published by Miwok Archeological Preserve of Marin. In this biologically rich area "all of the necessities of life were readily at hand, save a few which could be obtained through trade," writes the author.

Past and present residents of the watershed have taken differing views of the creek and its resources. The Spanish settlers, who chose the name Corte Madera, meaning "cut wood", used its acres of redwoods, which were harvested then floated down Larkspur Creek and shipped to San Francisco's Presidio to be used for lumber. A century later weekenders traveled with great anticipation from San Francisco by ferry and train, to rendezvous for hunting, fishing and socializing. Presen-day inhabitants who make their living near the creek, often fear it, as they recall the floods of 1982-83. Michael Whyte, owner of Whyte's Booksmith, recounts the moments that his books were swept away as the water level steadily rose during one of the biggest floods in the history of the Ross Valley.

No matter how the creek is regarded, people's actions affect Corte Madera Creek and its tributaries. Taking care of our streams will provide better water quality for people and animals. According to the National Science Foundation, small streams can purify polluted water more effectively than rivers can. The smaller the stream, the more quickly excessive nitrogen, derived from fertilizers can be removed by organisms that live on the streambeds and the less distance nitrogen will be transported down the stream.

Since wetlands around the bay have diminished by 90 percent it is even more important that we preserve the remnant creeks and marshes that are part of the Corte Madera Creek system. In addition to providing natural flood protection, and improving water quality, our creeks support numerous species of fish and wildlife. Twenty-two species of fish inhabit our creek, with the five most prevalent found upstream of the Ross fish ladder being Sacramento sucker, three-spine stickleback, California roach, sculpin and rainbow/steelhead trout.

All these five remain in the creek during their lifetime except the steelhead, which leaves after one to four years to spend time in the ocean, and then finally returns to Corte Madera Creek and its tributaries to spawn. Although mature adult steelhead are seldom seen here, two years ago County Creek Naturalist Liz Lewis found a 28" steelhead just above the Ross fish ladder. These fish need specific environments to thrive: they must have deep pools, and dark and dense vegetation; they also need cool water and sediment-free gravel, with enough oxygen for their eggs to develop.

In addition to providing habitat for fish, the watershed supports, or potentially could support, a number of other animal and special status plant species. There are at least 25 potential sensitive plant species in the watershed, and 32 species of animals. As recently as two years ago, another uncommon plant was found at Drake High School during a student planting project.

Our watershed is bountiful, but fragile, and its resources need protection.

Any use of text and photographs for other than personal purposes is prohibited without permission from Friends of Corte Madera Creek Watershed

All photographs © 2004 Charles Kennard unless otherwise credited

Website design by Karen Peterson, San Anselmo

Friends of Corte Madera Creek Watershed P.O. Box 415, Larkspur, California 94977 phone: (415) 457-6045 fax: (415) 457-6362 info@friendsofcortemaderacreek.org