## When wine making meets wildlife, it can be a beautiful thing: The Napa-Sonoma Marsh



Napa Sonoma Marsh.

DFG photo by Larry Wyckoff

he 40,000-acre area known as the Napa-Sonoma Marsh borders one of California's most famous wine regions: Carneros. Taking advantage of the cool marine influence of nearby San Pablo Bay, the wine growers in Carneros specialize in cool-climate grapes such as Chardonnay, Pinot Noir and Merlot. Gradually over the last 30 years, and more rapidly in recent years, vineyards have replaced dairy farms and grazing lands that formerly adjoined the marsh.

Now, thanks to an innovative partnership between California Special Anniversary Issue 2002 Department of Fish and Game (DFG) and Acacia, one of the wineries in the Carneros region, the Napa-Sonoma Marsh is getting a helping hand. Last year, DFG and Acacia began working

## By Larry Wyckoff

together to restore habitat for waterfowl and other wildlife in the Napa-Sonoma Marshes Wildlife Area (NSMWA), the state-owned and managed part of the marsh. This public/private partnership provides a mutually beneficial opportunity to achieve DFG goals for the marsh more quickly.

Located about 25 miles north of San Francisco, on the northern edge of San Pablo Bay, the marsh encompasses tidal, diked and seasonally flooded wetland, sloughs, rivers, salt ponds and diked agricultural fields. Like many such areas, it lost precious ground over the years to industrial and agricultural uses. Cargill operated solar salt ponds in the marsh until the 1980s, utilizing the evaporative properties of the windy site to make



Napa Sonoma Marsh is home to many bird species including black rails and Clapper rails.

DFG photo by Larry Wyckoff

concentrated brine that was then sun dried for industrial-grade salt. Before the vineyard expansion, hay farms and dairy operations on the uplands drained portions of the marsh.

In the 1970s, the state began purchasing parcels to create the NSMWA, now over 13,000 acres. The area provides important habitat for at least 25 species of fish, 128 species of birds, including 25 species of waterfowl, as well as the endangered California clapper rail, the threatened California black rail, the threatened salt marsh yellow throat and the western snowy plover.

Not long ago, DFG supervising biologist Jim Swanson was visiting the marsh when he met Paul Novak, the vice president of marketing for Chalone Wine Group, which is a collection of small wineries that includes Acacia. Novak loves the marsh and often walks his dogs there. The two men began a conversation.

Swanson had been thinking for some time about how to involve the local wineries in fundraising for the marsh. Because Acacia prides itself on its Carneros affiliation and believes that the quality of its wines derives largely from the uniqueness of its vineyard environment—Novak saw the value of getting the winery involved in marsh restoration.

Faced with a 40,000-acre marsh, the first reaction from the Acacia crew was

"it's so big, what can we do?" But, they quickly found out that DFG had a long list of small but important projects that had been cut because of funding constraints or simply not enough personnel to do them. Guided by DFG, Acacia has stepped in with labor, equipment, materials and know-how to tackle some of those jobs.

Last fall, its employees planted black walnut and coastal oak trees and a row of wild rose bushes at the Huichica Creek Unit of the NSMWA to form a "living fence" that provides cover and food for the expanding wildlife community. The winery has been growing grapevines in the region for more than 20 years and used its farming expertise to help these new plantings flourish by donating and installing drip irrigation and protecting the plants with grow tubes. These are standard techniques in the wine industry and a good example of what Acacia adds to the partnership.

In 2001, Acacia employees constructed a wildlife viewing blind at an adjacent location. The blind is a cozy, roofed hut overlooking a fresh-water pond that shorebirds, ducks and geese increasingly use. The blind is open to the public. The winery built the structure with timber salvaged locally from abandoned cow feeders. To attract wild birds, Acacia bought enough cereal grains for DFG to plant about 30 acres near the viewing blind. The marsh area draws nature lovers, photographers, school groups, fishermen, hunters, bird watchers, boaters, bicyclists and others. It is recognized as a premier place in the North Bay to observe wildlife because of the diversity of habitat and species. Nevertheless, there is more work to do to develop a diverse and sustainable ecosystem that will support a broad range of fish, wildlife and plant species.

DFG's objective is to develop a natural, self-sustaining complex of tidal salt water and brackish water marshes, managed salt marshes and ponds, fresh water and seasonal wetlands and adjacent uplands. DFG is currently working on a large-scale marsh restoration project in conjunction with the U.S. Army Corps of Engineers and The Coastal Conservancy. First, the former salt evaporation ponds must be desalinated through the addition of fresh water, followed by the habitat restoration phase.

Long-term goals include restoring large, self-sustaining parcels of tidal marsh from a portion of the salt ponds adjacent to the Napa River. The remainder of the ponds will be managed to maximize habitat diversity through water depth and salinities. While the salt pond restoration will take many years, other projects of less magnitude but equal importance can be accomplished in the near future.



Acacia helped to create a viewing blind at Napa Sonoma Marsh Wildlife Area by using recycled lumber.

DFG photo by Larry Wyckoff

DFG needs to develop new ponds and fresh water sources, both permanent and seasonal, in the uplands of the wildlife area. The fallow hay lands need conversion to natural upland or transitional upland zones with native vegetation. Over time, these combined efforts will improve the wildlife habitat for waterfowl, shorebirds, raptors, small mammals, and marine and aquatic organisms.

Many of these projects have long timelines due to limited funding and staffing. The cooperation with private entities, such as Acacia Winery, leverages valuable resources and allows much faster progress. DFG and Acacia are currently planning other joint projects.

These range from something as simple as delivering a dumpster so volunteers can clean up a section of the marsh to building a walkway blind and designing a pamphlet that describes the marsh. The largest project envisioned is building an educational center. To do that, Acacia plans to hold a major fund raising party at its winery and invite leaders from the many groups that could benefit from a healthy marsh.

Beyond its own donations of time, money and knowledge, Acacia hopes its efforts will act as a catalyst, attracting other wineries and local businesses to also adopt the marsh. In the meantime, Acacia has found another way to contribute. Winemaker Michael Terrien

created a special bottling of his 2000 Chardonnay, called Acacia Marsh Chardonnay, sold only at the winery. Proceeds from the sale of the wine are dedicated to the improvement of the NSMWA.

For additional information on the Napa-Sonoma Marshes Wildlife Area please call DFG at (707) 944-5500 or see DFG's Web Site at WWW.dfg.ca.gov.

For information specific to the salt pond restoration, please go to www.napasonoma-marsh.org

Larry Wyckoff is an associate wildlife biologist at the Napa-Sonoma Marshes Wildlife Area in DFG's Central Coast Region.



Acacia employees apply their expertise in cultivation to the fields at Napa Sonoma.

DFG photo by Larry Wyckoff