



### The Purest Expression Of Our Sustainability Philosophy: Laughlin Field.

All of our sustainability initiatives come to life at Laughlin Field, our proudest expression of our commitment to sustainable wine-growing. Laughlin Field is 88 acres located in Guerneville, California. When we decided to renovate Laughlin Field in 2002, we chose to do it in the most sustainable way possible.

Before installing the new vines at Laughlin Field, we reused and recycled nearly everything on the land. For example, the prior vineyard vines, old wooden stakes and end posts were all removed, chipped, and blended with grape pumice and manure to create compost. This compost was used to add organic material to the land and build soil structure. Even the old steel trellis posts and used plastic irrigation pipes were recycled.

We then conducted a GPS survey prior to planting to identify all pre-plant projects such as soil pit tests, drainage and property lines/markers. Soil pit tests are used to determine the appropriate rootstock

for each site location. The GPS survey allowed us to maximize energy and water efficiency and reduce as much waste as possible. To minimize our water usage, we installed a complex subsurface drainage system that actually collects rainwater and fills two on-site irrigation holding ponds. The collected water is used throughout the year for irrigation and frost control at Laughlin Field, eliminating the need for well water usage. When we do need water, a drip irrigation system and fertilization are used at Laughlin Field.

In 2006, KORBEL proactively installed two new Tier 3 clean-burning-fuel engines at the pumping stations for irrigation. While these clean-burning-fuel engines will be required by the state of California in the future, we are excited to be able to employ this new cleaner technology today.



All on-site electric pumps are used only during off-peak hours to save on energy costs.



On-site redwood trees that had fallen during rainstorms over several years were milled for lumber and used to remodel an old existing barn at Laughlin Field.

Laughlin Field has six owl boxes to attract our winged pest-management friends, and four wooden duck boxes are located near one of the irrigation ponds to encourage wildlife habitat.

Deer fencing was installed only around the perimeter of the vineyard, leaving approximately 58 acres of trees and natural habitat unfenced and preserved.

Liverau Creek, a tributary of the Russian River and located along the vineyard, is continuously being restored by KORBEL.



Celebrate Responsibly.

©2009 F. Korbel & Bros., Guerneville, Sonoma County, CA. Producers of fine California méthode champenoise champagnes for 127 years. KORBEL is a registered trademark. Code #421-3003

## KORBEL California Champagne Sustainable Practices

Just as KORBEL California Champagnes are integral to celebrations big and small, sustainability is integral to how we make our champagne. We are committed to sustainable wine-making and conserving the ecosystem around us. Our champagnes are a product of nature and the land on which the grapes are grown. We seek to safeguard that land and our natural resources for future generations and celebrations yet to come.

# KORBEL

## Energy Conservation And Efficiency.

We practice energy conservation at the Korbel Winery throughout our entire wine-making process. Such efforts are critical in these modern times, as they impact both our bottom line and the environment. At KORBEL, we have a comprehensive energy efficiency program that has improved our production and wine-making practices. For example:

- Over the past few years, we've installed energy-efficient refrigeration units that are 15% more efficient than the old ones, and our tank-wrapping initiatives have saved 90% of energy for storage and cold stabilization. Our new high-speed labeler enables us to use less energy to produce the same amount of bottles of KORBEL. We've also purchased energy-efficient equipment, including lighting, HVAC and clean-burning engines, and nearly our entire line of forklifts are electric vehicles.
- One of the top contributors to KORBEL's energy footprint is the field heat of grapes. To combat field heat, we harvest more than half of our estate grapes at night to reduce the amount of energy used for cooling the grapes. This saves approximately 58,000 kilowatt hours annually (or the equivalent of planting more than one thousand trees and growing them for ten years).
- We participate in the "Cut Back California" program at the KORBEL facility – a voluntary program to cut energy usage on peak-demand days during the summer months.
- Our commitment to energy conservation is ongoing, and we've conducted audits of our energy usage across our facilities to identify opportunities to improve efficiency. For example, we're working on installing a setback system that will shift more energy to off-peak times, thus reducing the need to build more power plants.

## Waste Reduction (Reduce, Reuse, Recycle).

Reducing our waste and our footprint on this planet is a key element to how we do business. Our integrated waste management program prioritizes reducing, reusing and recycling. In fact, **our production process is nearly zero waste**: 95% of the byproduct is either reused or recycled, which diverts 5,700 tons of waste from landfills. The state of California has recognized this achievement and presented KORBEL with a Waste Reduction Award Program (WRAP) award every year since 2000.

- **Reduce:** In an effort to remove unnecessary packaging, we eliminated the bidule (a small plastic ring on the bottle) in 2003 because it's not easily recyclable even though most sparkling wineries still use it. This small change has reduced our landfill waste by about 28,000 pounds per year.
- **Reuse:** We reclaim our lees filtration (the liquid wine mixed in with the solids) and what we can't reclaim, we send to East Bay Metro Utility District for use in their waste-to-energy cogeneration program.
- **Recycle:** We recycle everything from plastics to cardboard to glass to toner cartridges. We also manage a huge composting operation to turn our old grapevines and landscape refuse into all-natural and nutrient-rich fertilizer. Instead of tying off our vines with green plastic tape, we use only natural biodegradable tie rope that ends up in our compost heap. Our special blend of compost helps us grow amazing grapes while reducing the need for chemical fertilizers.



## Water Conservation.

Water is a key ingredient in making our great California champagnes. Because of our deep connection to the California land, we recognize the need to conserve water, which is already a scarce resource in our community. To that end, KORBEL's water conservation program has yielded a variety of successes, such as:

- On 125 acres of vineyards, KORBEL uses absolutely no well water. All water needs are met by reclaimed processed water, making us the largest user of reclaimed water in Santa Rosa, as we've been doing this for more than 20 years. We also use subsurface drainage to collect rainwater for all irrigation and frost control needs for approximately 125 acres.
- To minimize our water usage, we've installed soil moisture probes in the vineyards to ensure that we only irrigate when necessary. When we do have to irrigate, we use a drip system which is the most efficient way to irrigate and fertilize the vines.
- Our world-class gardens are an important part of the experience for our consumers when they visit KORBEL. We have initiated a number of practices to reduce the environmental impact, including drip irrigation instead of sprinklers, increasing water efficiency zones and timer programs, and we use more native species that use less water.



- KORBEL has also undertaken several initiatives to reduce the use of water in the production process, such as low-flow barrel washing. Our unique "boxes" system removes the additional step of washing/rinsing bottles, thus reducing the need for a significant amount of water.
- To continue our commitment, we're exploring the installation of irrigators on our bottling line that would "close the water loop" and allow us to reuse water to maximum efficiency.

## Sustainable Agriculture.

At its truest form, KORBEL is an agriculture-based company. Growing healthy flavorful grapes is one of the most important parts of creating great California champagne. We practice agricultural principals that will ensure that we are able to grow great fruit for many years to come.

- Avoiding erosion is critical to the health of our vineyards, so we implement several key practices, including using cover crops and spreading wheat and rice straw on our hillsides. The straw displaces rain runoff and also helps prevent soil compaction by creating a layer between the soil and rain.
- A healthy vineyard is one that is able to manage pests without heavy chemicals. Our integrated pest-management policies for fertilization, chemical use and irrigation have resulted in an overall reduction in chemical use. We also encourage owl populations on our vineyards through nesting boxes made of recycled wood, as owls are natural predators for vineyard pests.



- The Korbel Winery is certified as an organic processor by the California Certified Organic Farmers (CCOF). In order to achieve and maintain this certification, the entire production process must meet the CCOF's rigorous environmental standards and is audited annually to ensure compliance. In 2009, KORBEL released its first California Brut champagne made from organically grown grapes.

## Sustainable Packaging.

For KORBEL, sustainability must be incorporated throughout our entire product life cycle, from grapevine to finished bottle. We have undertaken a variety of initiatives to improve the environmental performance of our packaging.

- KORBEL has reduced the weight of its glass from 38.5 oz to 30 oz, saving many tons of an energy-intensive raw material, and these same bottles are made from 35% post-consumer recycled glass that uses less materials and energy.
- We also use as much recycled content as possible in our cardboard boxes. On average, KORBEL's cardboard boxes are made of more than 50% recycled content which adds up to about three million pounds of recycled content annually and is the equivalent of planting nearly 190,000 trees and growing them for ten years.



## Respecting Our Employees, Community And Environment.

We educate and engage our employees in sustainability through training, workshops, and workplace incentives. For example, we regularly inform employees about energy efficiency opportunities such as turning off lights and closing the doors to our climate-controlled wine cellars. We also hold annual recycling, conservation and sustainability meetings with employees in April in observance of Earth Day.

We believe that one of the reasons we're able to make great California champagne is that our vineyards are full of life. We have a responsibility to protect our ecosystem that includes the fish-spawning streams that flow across the KORBEL home ranch and our Green Valley vineyard. We annually work with the California Department of Fish and Game, and with Trout Unlimited to clean creeks and streams located within our vineyards to restore natural fish habitat for the coho and king salmon and the steelhead trout. Some of our practices include extra spill protection, catch basins, and river otter protection. While we fence off our vineyards from deer, we effectively operate a wildlife preserve on our remaining 1,000 acres as it serves as a protected habitats for wild boars, turkeys, deer and a whole host of other local animals.

