



The article ***Winged Predators Taking Flight for Crop Protection*** was written by Mark Souder and published in **San Luis Obispo County Farmer & Rancher Magazine**, September, 2003, V 32, Issue 9, pp. 10-11

Wine enthusiasts aren't the only ones interested in wine grapes. Unfortunately, for many growers here on the Central Coast, so do a variety of birds - most notably the European starling. This black, light-speckled, robin-sized European import is most notorious to area growers for its voracious appetite in the vineyard. During the several weeks prior to harvest, as grapes begin to fully mature, most growers scramble to maintain some measure of bird control - because left untreated can spell serious damage to one's crop.

There's no shortage of conventional abatement methods currently available on the market, some of which known to be more reliable than others. But now Brad Felger, a local falconer offers a very unconventional way to ward off these pesky winged freeloaders. With Air Strike Technologies Felger offers his birds of prey to simply do what they do best.

Brad is involved in the sport known as falconry, the ancient art and practice of hunting wild quarry with a trained bird of prey. The early history of falconry traces as far back as 2000 B.C., developed in the ancient civilizations of the Middle East, Asia, and Europe.

A licensed master falconer with the California Department of Fish and Game, Felger owns a number of birds, each specially trained for different bird abatement techniques. Brad uses primarily non-indigenous falcons, including Barbary, Lanner and Saker breeds. Although some of the equipment has been modernized, the basic method of falconry training hasn't changed since the early days. The general philosophy is to condition the falcon to recognize and accept the falconer as a partner in the hunting process, while maintaining its natural physical condition and hunting instincts. Training is accomplished through careful weight management, positive reinforcement, and repetition.

Falcons need not kill any birds for results; they're able to simply drive them away. Once birds such as starlings are able to see a falcon acting in its "predator" mode, such as dive-bombing and swooping, they know it's high time to flee.

"It's basically a way of using natural, inherent methods," Brad said. "It's inherent in the instincts of the prey to fear the predator. For generations these birds have been hunted by these falcons in the wild, so they're very fearful,"

One local winegrower to recently employ Felger's unique services is Jean-Pierre Wolff, Ph.D., Winemaker and co-owner of Wolff Vineyards in Edna Valley. Here at the 125-acre vineyard estate on Orcutt Road, Farm Bureau members Jean-Pierre and his wife, Elke, continually strive to improve and maintain an ecologically friendly setting with various sustainable wine growing practices.

Jean-Pierre is an adamant supporter of the new falconry project at Wolff Vineyards, one that he says integrates well into his natural habitat conservation program. This back-to-basics approach of falconry, he says, not only reflects their firm eco-logical ideals but also serves as being quite effective in approach.

“My whole concept is to try to use this as another element in what really is referred to as biodynamic farming,” he said. “It’s kind of a win-win for what I want to do because it falls right into the spirit of my ecological vineyard, and it also works well in terms of trying to use a technique that is a lot more efficient.”

Noise devices and other man-made repellents used in the field can be helpful to a degree, Felger says, but tend to lose their potency as birds become acclimated to them. Noise pollution, Jean-Pierre points out, can also become an issue with neighboring communities that border many growers in the area. He added that netting, although popular with growers, can also prove a costly and inefficient avenue due to short net life span, bird collateral damage and canopy damage.

“The man-made deterrents start out with a big bang, but seem to lose their effectiveness over time, Felger said. “The falconry doesn’t; it just keeps gaining momentum. In my opinion, it has proven itself to have a better, long-lasting effect.”

A resident of Atascadero, Brad started falconry as a childhood hobby back in 1970, and has been involved with falcon handling ever since. A licensed falcon breeder through the United States Fish and Wildlife Service, he has 12 years experience in the captive breeding of the birds.

Brad points out that the program is capable of being effective for most types of crops effected by bird damage—not just wine grapes.

“Ideally, what I’d like to do is put the word out to different types of agriculture about the effectiveness of falconry as an alternative to the man-made deterrents to bird abatement that are currently used,” he said. “Scientific data proves this works.” He estimates that there are somewhere between 750 to \$50 licensed falconers within the state, but adds most are not involved in any professional falconry capacity. “Out of that, there’s a very small pool of falconers that are really not only qualified and capable, with the resources, but also willing to do bird abatement,” he said. “So it’s pretty much a specialized thing in certain areas.”

Brad says that since a single falcon is able to cover hundreds of acres of crop in a single flight, neighboring vineyard operations could easily become included as part of one falconry program. Jean-Pierre says he would like to instigate what he calls an “unofficial falconry co-op,” and have some growers within his neighboring area become interested in the abatement program. Recently he hosted a symposium at his vineyard during the KCBX Central Coast Wine Classic last July, providing an opportunity for people to see falconry demonstrations, ask questions, and better understand the program as a whole.

“There’s a point of economics where falconry for larger combined properties can be a more cost-effective method than the traditional methods,” said Jean-Pierre. “And in addition to the cost-effectiveness, the logistics become a lot easier. I’m trying to give as much exposure as possible, because I think we need the growers to see that it truly works. And also I think it’s going to help increasingly in the areas where you have the pressure of population growth.”

One close-range abatement method that Brad uses is known as “lure flying.” Bait is attached to a string and swung in a circular motion by the falconer. The falcon flying overhead is trained to then swoop and dive down to grab the bait, known as “stooping to the lure” - somewhat similar to a matador beckoning a bull. These actions mimic the falcon’s predatory pursuit movements, acting as a scare tactic for all nearby quarry which instinctively will take flight from the area.

Another method Felger is developing is known as “ballooning,” an approach similar to lure flying, only performed high above the ground. This particular method involves releasing a tethered weather balloon some 500 feet in the air, with an attached bait release system where the falcons fly up and grab. This method, Brad says, works best for larger areas than lure flying because the predatory action taking place at higher altitudes allows itself to be much more visible by birds located farther away.

The most effective and longest range method of all is known as “pursuit.” A falcon is released to comb the countryside searching for target birds, which it will then proceed to chase off from the area.

Currently, falconry is a legal practice in all but two states, and is considered one of the most highly regulated of all field sports. There are approximately 3,000 licensed falconers in the United States.

“I like to meet the needs of the grower,” Felger said. “Every vineyard is a little different and unique to itself, and so it’s important to come up with a program that’s suited for each particular vineyard needs.”

For more information, contact Air Strike Technologies at 805 391-0444, or Wolff Vineyards at 805 781-0448.