

A COST-EFFECTIVE METHOD FOR APPLYING AND REMOVING BIRD-EXCLUSION NETTING IN COMMERCIAL VINEYARDS

LAWRENCE D. FULLER-PERRINE,¹ Department of Horticultural Sciences, Cornell University, Long Island Horticultural Research Laboratory, 39 Sound Avenue, Riverhead, NY 11971

MARK E. TOBIN,² U. S. Fish and Wildlife Service, New York Cooperative Fish and Wildlife Research Unit, Department of Natural Resources, Cornell University, Ithaca, NY 14853-3001

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Bird-exclusion netting can be highly effective for reducing bird damage to agricultural crops, but the high cost of materials and perceived difficulty of applying and removing it has discouraged many growers from using this technique. The expectation of extensive damage to a high-value crop may warrant the implementation of costly protection measures such as bird-exclusion netting. During 1987, we evaluated a method for applying and removing bird-exclusion netting in 4 commercial vineyards on the North Fork of Long Island, New York. The method involved altering a hydraulically-operated, front-end bucket-loader to accommodate loading and applying 5.2-m-wide nets directly over rows of grape vines. Applying the netting, including loading and unloading the rolls of netting, required an average of 2.5 hr/ha for 3 people. Removal required an average of 2.8 hr/ha for 3 people. The single largest cost was

the price of the netting, which accounted for approximately 70-74% of the total cost of the program. Four growers have used the netting for 5 seasons with minimal damage and anticipate using the netting for at least 1 additional season. The total cost of modifying the tractor and purchasing, applying, and removing the netting, based on an estimated net life of 5 yr, was \$509-\$534/ha/yr. Assuming that the netting is 95% effective in preventing bird depredations, it provides cost-effective protection in vineyards where high levels of damage (>6%) are anticipated. However, the netting may not be practical in small vineyards or where low levels of damage are expected. An increasing number of vineyard managers on Long Island are using bird-exclusion netting to protect their vineyards from birds.

¹ Present address: Gristina Vineyards, P.O. Box 1009, Cutchogue, NY 11935

² Present address: U. S. Department of Agriculture, Denver Wildlife Research Center, Hawaii Field Station, P. O. Box 10880, Hilo, HI 96721