

Deer

Deer, the most important big game species in this county, are found in suitable habitat throughout the United States. They are even-toed, *ungulates* of the order Artiodactyla, as are our domestic cattle, sheep, and goats.

Damage

Deer are the largest of our avocado pests and can be a serious problem, particularly where young avocado groves are planted next to uncultivated land inhabited by these animals. A very typical example of deer depredation occurred on several acres of young avocados planted in Ventura County. Since this planting was quite removed from any other orchards and adjacent to a National Forest, the extensive damage was predictable. Deer can nearly completely strip young trees of foliage and sometimes bark. Where populations are high and the summers are dry, the lush foliage of avocados under irrigation is highly attractive. Damage may be sufficiently extensive that small limbs are eaten or broken, causing severe stunting and distortion of the development of a good framework of scaffold branches. When planting new orchards, in remote areas, consideration should be given to potential deer problems.

Control

A deer problem can be resolved for the most part by complete fencing of an avocado orchard. Although there are many designs of deer-proof fences, a woven mesh wire (4 x 4 inches) fence 6 feet high is usually adequate for upright fences on level ground. Deer normally will not jump a 6-foot fence unless pressed by dog or humans when they are capable of clearing an 8-foot fence. On steep slopes with deer running downhill, an 8-foot fence is required. Adequate gates or deer guards permit entry into the grove and yet exclude the deer.

An important factor to remember is that deer fences must be checked regularly. Damaged wire, broken gates, and soil washouts beneath fences, which permit deer access, must be repaired.

While exclusion is the only satisfactory control for deer, a number of repellents have been used with limited and unpredictable success. These include the "flicking" of new foliage with a slurry of blood meal, tying small bags of lion manure (when available from zoos, etc.) of blood meal stapled on tree stakes, and spraying trees with any one of a number of repellents that are available. Of these, a chemical called thiram and sold under various trade names is one of the best. Repellents depend upon the deer's sense of smell or taste, consequently each new flush of foliage must be covered or bags of lion manure or blood meal replaced as the odor dissipates.

For small number of trees, individual wire cages are effective.

Avocados are most vulnerable to deer depredation during the first year, about 50% of the problem the second year, and decreases after that. Either the foliage becomes unpalatable to deer, or regrowth is so rapid the damage is less obvious.

While it is not considered to be a long-term control, shooting does offer some temporary and immediate relief, particularly at critical times when deer are numerous and natural feed is in short supply. Permits can be obtained to kill deer the year around when crop depredation occurs.