Apples: Pennsylvania total utilized apple production in 1998 totaled 404 million pounds. Apple producers received 0.121 cents per pound in 1998. Values of utilized apple production in Pennsylvania during 1998 was \$48.9 million. The 1998 wildlife damage to apple production is estimated at \$466,000, about 1 percent of value of production. Producers spent approximately \$275,000 to prevent wildlife damage to their apple crop in 1998. Nationally the most frequently reported wildlife causing damage to apple crop were starlings (16%), deer (14%), mice and voles (10%), and robins (9%). The most frequently reported methods used to prevent wildlife damage were pyrotechnics (21%), flagging (15%), repellents (15%), frightening devices (14%), and fencing (14%).

Grapes: The total utilized grape production in 1998 totaled 54,000 tons. Grape producers received 267 dollars per ton in 1998. Value of utilized grape

production in Pennsylvania during 1998 was \$14.4 million. In 1998 wildlife damage to grape production is estimated at \$138,000, about 1 percent of value of production. Producers spent approximately \$62,000 to prevent wildlife damage to their grape crop in 1998. Nationally the most frequently reported wildlife causing damage to grape crop were starlings (14%), ground squirrels (9%), blackbirds (8%), deer (8%), and coyotes (7%). The most frequently reported methods used to prevent wildlife damage were fencing (24%), flagging (18%), pyrotechnics (18%), frightening devices (13%), and repellents (7%).

The National Agricultural Statistics Service marked the first release of the U.S. fruit wildlife damage publication in 1999. The U.S. estimates covers 7 states, including California, Michigan, New Jersey, New York, North Carolina, Pennsylvania, and Washington. The wildlife damage survey was funded by USDA, APHIS, Wildlife Services.

Pennsylvania & Major States Wildlife Damage to Apples: Production Price. Value. Estimated. & Expenditures 1998

State	Utilized Apple Production	Apple Price per Pound	Value of Utilized Apple Production	Total Dollar Value Lost from Wildlife Damage	Total Expenditures on Wildlife Damage Prevention
	(000)	Dollars	(000) Dollars		(000) Dollars
California	800,000	.166	133,150	3,257	404
Michigan	930,000	.087	81,300	1,396	576
New York	1,010,000	.112	113,590	1,619	846
Pennsylvania	404,000	.121	48,905	466	275
Washington	5,900,000	.104	613,100	4,166	1,133
Other States	1,553,200	.152	236,335	2,600	780
U. S. TOTAL	10,597,200	.116	1,226,380	13,504	4,014

Pennsylvania & Major States Wildlife Damage to Grapes: Production Price, Value, Estimated, & Expenditures 1998

State	Utilized Grape Production	Grape Price per Ton	Value of Utilized Grape Production	Total Dollar Value Lost from Wildlife Damage	Total Expenditures on Wildlife Damage Prevention
	(000)	Dollars	(000) Dollars		(000) Dollars
California	5,065,000	448.00	2,269,910	19,725	4,767
Michigan	71,000	251.00	17,798	250	54
New York	125,000	305.00	38,146	1,143	254
Pennsylvania	54,000	267.00	14,404	138	62
Washington	222,000	482.00	107,004	1,460	195
Other States	55,005	819.00	45,044	419	99
U. S. TOTAL	5,592,005	446.00	2,492,306	23,135	5,431