# 2022 Wildlife Damage Abatement and Claims Program Annual Report provided to the Legislature

Wisconsin Department of Natural Resources, Wildlife Damage Abatement and Claims Program<sup>1</sup>

#### May 31, 2023

The 1997 Wisconsin Act 27 established a requirement that the Department of Natural Resources (DNR) shall prepare an annual report to be submitted to the appropriate standing committees on specific aspects of the Wildlife Damage Abatement and Claims Program (WDACP). The Legislature detailed in statute [s. 29.889(11)(a), Stats.] that the following information be included in the report:

1) Identification of all the wildlife damage believed to have occurred in the state,

2) The wildlife damage claims that were filed under the WDACP,

3) The wildlife damage abatement measures that were recommended or implemented under this section,

4) The percentage of the total number of filed wildlife damage claims that are rejected for failure to meet the requirements of the program, and

5) The percentage of the total number of wildlife damage claims for which the amount of the payment to the claimant was prorated.

## All Wildlife Damage

Agriculture is Wisconsin's largest industry, with approximately 14.3 million acres in production on 64,400 farms, with an annual value of nearly \$12 billion, according to the 2020 census conducted by the National Agricultural Statistics Service. Wisconsin ranks 9<sup>th</sup> in the U.S. in the total value of agricultural products sold.

State statute [s. 29.889(11)(a)1., Wis. Stats.] directs the DNR to identify all wildlife damage that has occurred in the state. However, it is not possible to accurately estimate "all" wildlife damage in Wisconsin without an extensive statistically valid sample of all types of wildlife damages across the state. If taken in the most literal and broad sense, this would be an immense cost and would include such things as car/deer collisions and the associated costs of human injuries and property damage. If limited to all wildlife damage caused by a wide variety of wildlife; raccoons, coyotes, squirrels, birds, etc., that feed on crops and prey on livestock on all properties. The data provided in this report is the information that is collected through the voluntary participation of producers in the WDACP. Therefore, the data provided are not statistically valid samples of all deer, geese, bear, turkey, and elk damages in Wisconsin.

Pursuant to s. 29.889(1), Wis. Stats., the WDACP only appraises damage caused by wild deer, turkeys, geese, bear, elk, and cougar. Appraisals are only conducted if the crops are eligible for compensation and an appraisal is requested by the crop owner. In 2022, 43,590 acres of agricultural crops were appraised with 2,432 acres damaged by deer, 249 acres damaged by bear, 222 acres damaged by geese, 104 acres damaged by elk, and 4 acres damaged by turkeys. There were no damages claimed for cougars. Nine hundred and ninety-six producers enrolled in the WDACP in 2022, 208 of whom submitted wildlife damage claims in which crop appraisals were conducted (**Table 1, Figures 2 and 3**).

The Department of Agriculture, Trade and Consumer Protection attempted to assess total damage caused by deer in Wisconsin in 1984. Their survey estimated statewide deer damage at \$36.7 million. However, the survey was based on asking farmers how much deer damage they thought they had, rather than actual appraisals of damaged crops. Such

<sup>&</sup>lt;sup>1</sup> The WDNR WDACP is comprised of a Wildlife Damage Biologist, and a Wildlife Damage Program Assistant.

surveys are problematic and likely to be biased. A 2001 report by the National Agricultural Statistics Service (NASS) estimated U.S. agricultural losses at \$944 million due to wildlife damage. This estimate was further broken down to \$619 million in damages to field crops, \$178.2 million in damages to livestock and poultry, and \$146.3 million in damages to vegetables, fruits and nuts. Deer were estimated to cause 58 percent of the damage to field crops and 33 percent of the damage to vegetables, fruits and nuts. Turkeys caused 6 percent and geese caused 5 percent of the damage to field crops. This survey was based on asking farmers how much damage they thought they had by species, rather than by actual appraisals of damaged crops.

## 2022 Wildlife Damage Claims

The number of wildlife damage claims filed with the department decreased in 2022, from 226 claims in 2021 to 208 claims in 2022. In 2022, damage from eligible species was documented on over 3,000 acres, totaling \$1,439,403 in appraised losses (Table 1). Commodity prices were higher for corn and for soybeans in 2022 than in the previous year. The median price paid by the WDACP in 2022 was \$6.35 per bushel for corn and \$13.50 per bushel for soybeans. The median prices in 2021 were \$5.48 per bushel for corn and \$12.98 per bushel for soybeans. Crop prices vary by county and are determined by each participating county Land and Water Conservation Department by averaging yearly commodity prices at several local feed dealers, grain distribution centers, hay auctions, or feed mills. According to the Wisconsin Crop Production Report by the USDA-Agricultural Statics Service, Wisconsin's corn for grain yield was estimated at 180.0 bushels per acre and is the same estimated yield as 2021. The average soybean yield decreased slightly, decreasing increasing from 55.0 bushels per acre in 2021 to 54.0 bushels per acre in 2022.

The number of wildlife damage claims and appraised losses has fluctuated over the history of the program (**Figure 1**). Fluctuations can be attributed to changing crop prices, changes to the WDACP, changes in wildlife populations, and changes in culture. One cultural norm that is changing is the proportion of landowners that are willing to allow public hunting access to their property. Opportunities for personal/family recreation, especially opportunities for deer hunting, seem to be becoming more important than compensation for crop damages. Anecdotal evidence also indicates neighboring landowners with strong recreational hunting interests are influencing previous program enrollees to no longer enroll in the program nor seek shooting permits. Over 141,087 acres of privately-owned land was opened to deer, bear, turkey, elk and/or goose hunters in 2022 through the wildlife damage abatement and claims program.

## 2022 Prescribed Wildlife Damage Abatement Measures

Early notification of damages and implementation of damage abatement measures are crucial to reducing wildlife damage losses and compensation costs to the state. The primary abatement measure is the issuance of shooting permits that allow the removal of animals outside the regular state hunting seasons. In 2022, 576 agricultural damage deer shooting permits were issued across the state under which 3,970 deer were reported to be removed (**Table 2**). Agricultural damage deer shooting permits are cost-efficient to implement compared to other abatement options such as fencing, repellents, or harassment, especially on larger fields. When appropriately used, agricultural damage deer shooting permits are very effective at reducing deer damage in current and subsequent years in areas with high deer populations. Because deer are an abundant wildlife species, agricultural deer shooting permits have very little impact on deer populations at the deer-management-zone scale, yet they give producers the ability to control deer numbers and reduce damage on their land. The harvest on deer damage shooting permits totaled approximately 1.17 percent of the statewide deer harvest in 2022. Deer harvest on deer damage shooting permits in 2022 ranged from 0 - 4.1 percent of the total deer harvest at the individual deer management zone level.

Administrative Rule NR 12.37(4)(a)5 was enacted in 2013 which stipulated that agricultural producers enrolled in the WDACP who experience \$1,000 or more of appraised deer damage, as documented by their wildlife damage claim, be automatically issued a shooting permit by February 15<sup>th</sup> of the following year if the enrollee wanted to remain eligible for deer damage compensation. One hundred and twelve agricultural producers were automatically issued a deer shooting permit by February 15<sup>th</sup>, 2022, through this rule. Enrollees that receive these deer shooting permits must

shoot a minimum of 80 percent of their deer harvest objective by September 15<sup>th</sup> to remain eligible to receive deer damage compensation.

Legislation was enacted (2005 Wisconsin Act 82) which allows landowners to enroll in the WDACP and receive deer damage shooting permits without allowing public access to the enrolled property for deer hunting. These enrollees cannot receive any abatement assistance other than a deer shooting permit, and they are not eligible for any deer damage compensation. In 2022, 390 shooting permits were issued through the option created under Act 82 where public hunting access was not required, and no deer damage compensation was paid to the producer. A total of 2,525 deer were registered on these permits.

Agricultural damage shooting permits are only occasionally issued to address bear, goose and turkey damage, as the behavior of these animals can generally be modified by non-lethal methods of abatement. Turkeys rarely cause the \$1,000 worth of damage necessary to be eligible for a shooting permit unless a high-value crop is affected such as ginseng or stored feed bags where feed spoilage is a risk. Fifteen Agricultural Damage Turkey Shooting Permits were issued in 2022 on which 48 turkeys were registered (**Table 3**).

In 2010, the department implemented the U.S. Fish and Wildlife Service's Canada Goose Agriculture Depredation Order which allows the department to issue Canada goose shooting permits from May 1, through August 31, when Canada geese are damaging agricultural crops. Prior to the implementation of this order, permits to shoot Canada geese outside the Horicon Goose Hunting Zone had to be issued by the U.S Fish and Wildlife Service, and cost \$50 for private landowners. There is no cost for the state-issued permit. In 2022, 84 spring Canada goose shooting permits were issued to agriculture producers on which 318 geese were reported to be removed (**Table 3**).

The primary abatement method used for bears causing agricultural damage is trapping and translocation (**Table 4**). Corn is the primary agricultural crop damaged by bears and is most frequently damaged during the milk stage of development which typically occurs in August each year and prior to the bear hunting season. Because of the relatively short timeframe when corn is vulnerable to extensive bear damage, effective bear damage control is obtained by live-trapping the bears and translocating them to large, forested tracts of public land at a minimum of 20 miles from the capture site. Though translocated bears often return to their home ranges (Massopust 1984), University of Wisconsin-Stevens Point researchers found that males would not return for an average of 14 days and females for an average of 34 days. This allows corn to mature past the vulnerable milk stage, making the corn less susceptible to bear damage (Stowell and Willging 1992). In 2022, 425 bears were trapped and translocated to locations away from the crops or apiaries they had been damaging, or because of potential livestock depredation concerns. Bear Shooting Permits are sometimes issued in situations in which trapping and translocation is ineffective at preventing damages from bears, or if bear trapping sites are inaccessible. Shooting permits can also be issued to supplement trapping and translocation efforts. Thirty Bear Shooting Permits were issued in 2022 on which 51 bears were removed by landowners and hunters (**Table 3**).

A variety of other abatement measures are used to reduce current and future wildlife damage losses (**Table 5**). One abatement measure all applicants are required to comply with in order to be eligible for compensation of wildlife damage is to provide hunting access to the public for the species causing damage. Hunting access is beneficial for hunters that are funding the program by providing hunting access to privately-owned lands; and is beneficial to agriculture producers by hunters removing animals causing damage or by altering animal behavior. Scare devices (pyrotechnics, propane cannons and Mylar flagging) are very effective goose and turkey abatement measures, especially if used soon after damage starts. Other commonly used damage abatement measures include the use of temporary fencing and repellants. For elk damages occurring in 2022, several temporary fencing designs were tested to exclude elk from crop fields or prevent access to stored feed bags. Ground and aerial spraying of repellents was utilized at three locations to address elk damage to corn. A diversion crop project was implemented in Jackson County to test the efficacy of using diversion crops as an elk damage abatement tool. 2023 will be the third year of that project. Circumstances occasionally call for harvesting crops as soon as possible. In situations with low yet widespread and fragmented damage, or areas within municipal limits that restrict hunting opportunities, there may be little practical abatement available.

The Department may authorize the installation of an eight-foot woven-wire fence in cases where high-value crops, such as tree stock, orchards, and cranberries, are being severely damaged by elk or deer, and damage claims will exceed the cost of the fencing project over a 15-year period. The WDACP pays 75 percent of the fencing materials and installation costs and landowners pay the remaining 25 percent. Permanent fence contracts are valid for 15 years and are recorded with the county Register of Deeds. Eight permanent fences were constructed in 2022, protecting approximately 384 acres of high-value crops including blueberries, cranberries, and a variety of vegetables. The WDACP costs for fence materials and installation totaled \$238,275. These fences are estimated to save the program approximately \$514,000 over the 15-year term of the contracts (**Table 6**).

## **Rejected Claims**

Counties participating in the WDACP denied 24 claims in 2022 (**Table 1**). Denials were issued in cases where claimants did not comply with eligibility requirements or appraised damage did not exceed the legislatively required \$500 claim deductible. Claims denied by the counties are not audited by the department; the county denial decision is treated as final. A producer who disagrees with the denial can file an appeal through the county's appeals process. Two claims are being held in abeyance; one claim is pending review and approval by Bayfield County and one claim is pending signature by the agriculture producer.

#### **Bibliography**

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Stowell, L.R. & R.C. Willging. 1992. Bear damage to agriculture in Wisconsin. Proc. East. Wildl. Control Conf. 5:96-104.

If you have any questions about this report or the WDACP, please contact Brad Koele, Wildlife Damage Biologist, at 608-576-3914, or by writing WDNR, WM/6, P.O. Box 7921, Madison, WI 53707-7921, or via e-mail at Bradley.Koele@wisconsin.gov.

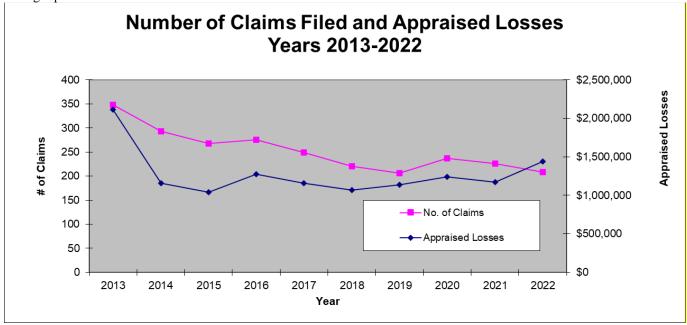
 Table 1: 2022 Wildlife Damage Abatement and Claims Program statistics by county.
 Source: WDNR WDACP

 Database and personal communication with USDA-Wildlife Services and county wildlife damage specialists.

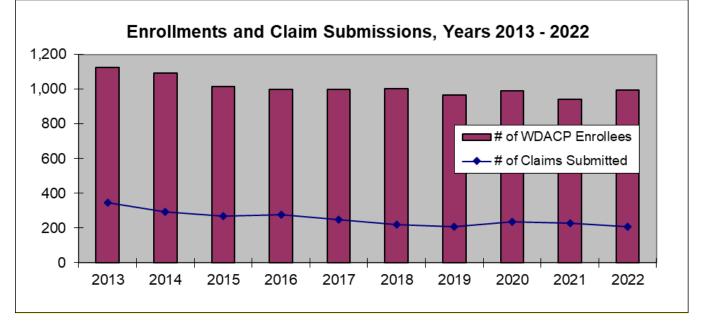
County	No. of Enrollees	No. of Claims Filed	No. of Approved Claims	No. of Claims Pending	No. of Denied Claims	Total Appraised Damages	Total Damages Eligible for Payment	Total Payments for Damages
Adams	9	1	1	0	0	\$2,938.70	\$2,438.70	\$2,438.70
Ashland	8	2	1	0	1	\$7,258.09	\$6,335.40	\$6,290.75
Barron	18	4	3	0	1	\$7,975.90	\$6,609.16	\$6,609.16
Bayfield	7	2	0	0	2	\$226.53	\$0.00	\$0.00
Brown	10	8	7	0	1	\$58,438.28	\$38,248.44	\$38,248.44
Buffalo	9	1	1	0	0	\$3,232.50	\$2,732.50	\$2,732.50
Burnett	13	8	8	0	0	\$61,287.58	\$45,762.94	\$45,762.94
Calumet	5	1	1	0	0	\$26,796.28	\$10,000.00	\$10,000.00
Chippewa	16	0	0	0	0	\$0.00	\$0.00	\$0.00
Clark	23	3	3	0	0	\$8,229.48	\$6,608.01	\$6,608.01
Columbia	29	3	3	0	0	\$57,460.76	\$21,800.00	\$21,800.00
Crawford	9	3	2	0	1	\$32,584.37	\$25,624.29	\$15,624.29
Dane	13	1	1	0	0	\$5,603.44	\$5,082.75	\$5,082.75
Dodge	25	4	3	0	1	\$11,582.87	\$9,635.27	\$9,635.27
Door	10	0	0	0	0	\$0.00	\$0.00	\$0.00
Douglas	6	1	1	0	0	\$1,872.97	\$1,372.97	\$1,372.97
Dunn	20	0	0	0	0	\$0.00	\$0.00	\$0.00
Eau Claire	5	0	0	0	0	\$0.00	\$0.00	\$0.00
Florence	5	0	0	0	0	\$0.00	\$0.00	\$0.00
Fond du Lac	7	2	2	0	0	\$13,699.51	\$10,780.50	\$10,780.50
Forest	8	0	0	0	0	\$0.00	\$0.00	\$0.00
Grant	17	5	5	0	0	\$69,193.67	\$40,665.21	\$40,665.21
Green	7	0	0	0	0	\$0.00	\$0.00	\$0.00
Green Lake	21	8	8	0	0	\$66,602.03	\$49,815.99	\$49,815.99
Iowa	12	3	3	0	0	\$9,442.91	\$7,942.92	\$7,942.92
Iron	1	1	0	1	0	\$546.88	\$146.87	\$0.00
Jackson	19	2	2	0	0	\$22,404.43	\$14,461.92	\$14,461.92
Jefferson	10	1	1	0	0	\$2,113.85	\$1,613.85	\$1,613.85
Juneau	17	1	1	0	0	\$4,381.54	\$3,881.55	\$3,881.55
Kenosha				Not	In	Program		
Kewaunee	16	2	2	0	0	\$18,103.15	\$12,360.37	\$12,360.37
La Crosse	6	0	0	0	0	\$0.00	\$0.00	\$0.00
Lafayette	5	1	1	0	0	\$3,724.19	\$3,224.19	\$3,224.19
Langlade	11	0	0	0	0	\$0.00	\$0.00	\$0.00

County	No. of Enrollees	No. of Claims Filed	No. of Approved Claims	No. of Claims Pending	No. of Denied Claims	Total Appraised Damages	Total Damages Eligible for Payment	Total Payments for Damages
Lincoln	14	2	2	0	0	\$5,942.32	\$4,942.32	\$4,942.32
Manitowoc	15	3	3	0	0	\$17,960.29	\$14,050.17	\$14,050.17
Marathon	56	7	7	0	0	\$84,193.05	\$40,150.50	\$40,150.50
Marinette	26	12	10	0	2	\$135,582.30	\$65,850.11	\$62,226.17
Marquette	16	5	5	0	0	\$86,259.72	\$47,627.86	\$47,627.86
Menominee				Not	In	Program		
Milwaukee	1	0	0	0	0	\$0.00	\$0.00	\$0.00
Monroe	25	2	2	0	0	\$2,430.33	\$1,430.32	\$1,430.32
Oconto	7	1	1	0	0	\$3,221.00	\$2,856.00	\$2,856.00
Oneida	12	0	0	0	0	\$0.00	\$0.00	\$0.00
Outagamie	34	11	9	1	1	\$112,235.51	\$77,579.47	\$66,228.62
Ozaukee	3	1	1	0	0	\$7,672.50	\$6,738.00	\$6,738.00
Pepin	2	0	0	0	0	\$0.00	\$0.00	\$0.00
Pierce	16	1	1	0	0	\$3,974.78	\$3,474.78	\$3,474.78
Polk	16	7	6	0	1	\$37,706.48	\$29,346.43	\$29,346.43
Portage	15	3	2	0	1	\$24,239.44	\$14,000.00	\$14,000.00
Price	20	9	6	0	3	\$42,602.86	\$32,361.47	\$32,361.47
Racine	0	0	0	0	0	\$0.00	\$0.00	\$0.00
Richland	8	2	2	0	0	\$12,774.50	\$11,029.01	\$11,029.01
Rock	5	0	0	0	0	\$0.00	\$0.00	\$0.00
Rusk	33	21	17	0	4	\$134,562.35	\$64,334.02	\$63,688.14
Saint Croix	12	3	3	0	0	\$20,156.90	\$17,337.94	\$17,337.94
Sauk	17	1	1	0	0	\$3,056.88	\$2,556.89	\$2,556.89
Sawyer	21	14	12	0	2	\$67,094.28	\$32,714.54	\$32,714.54
Shawano	15	2	2	0	0	\$3,304.88	\$2,304.88	\$2,304.88
Sheboygan	9	1	1	0	0	\$970.42	\$470.42	\$470.42
Taylor	32	2	2	0	0	\$2,396.02	\$1,501.02	\$1,501.02
Trempealeau	13	3	3	0	0	\$27,138.86	\$21,239.62	\$21,239.62
Vernon	56	2	2	0	0	\$4,109.75	\$3,109.75	\$3,109.75
Vilas	7	0	0	0	0	\$0.00	\$0.00	\$0.00
Walworth	4	0	0	0	0	\$0.00	\$0.00	\$0.00
Washburn	10	8	6	0	2	\$18,610.66	\$15,194.99	\$15,194.99
Washington	12	2	2	0	0	\$11,357.46	\$9,574.78	\$9,574.78
Waukesha	8	0	0	0	0	\$0.00	\$0.00	\$0.00
Waupaca	17	1	1	0	0	\$4,530.66	\$4,030.66	\$4,030.66
Waushara	17	8	7	0	1	\$41,438.11	\$32,873.11	\$31,122.98
Winnebago	3	3	3	0	0	\$10,624.27	\$9,208.23	\$9,208.23
Wood	22	3	3	0	0	\$17,556.25	\$15,050.43	\$15,050.43
Total	996	208	182	2	24	\$1,439,402.75	\$910,081.52	\$882,519.20





**Figure 2: Number of WDACP enrollees and claims, 2013 – 2022.** Source: WDNR WDACP Database and personal communication with USDA-Wildlife Services and county wildlife damage specialists.



**Table 2: Number of Agricultural Damage Deer Shooting Permits issued in 2022 by county.**Source: WDNR WDACP Database.

County	Number of Permits	Harvest
Adams	8	38
Ashland	1	6
Barron	6	34
Bayfield	3	11
Brown	1	12
Buffalo	3	26
Burnett	6	49
Calumet	3	5
Chippewa	8	61
Clark	9	68
Columbia	13	99
Crawford	8	44
Dane	10	44
Dodge	6	27
Door	5	20
Douglas	2	13
Dunn	14	141
Eau Claire	3	18
Florence	4	34
Fond du Lac	3	18
Forest	6	31
Grant	17	129
Green	5	41
Green Lake	20	172
Iowa	9	69
Iron	0	0
Jackson	8	26
Jefferson	7	24
Juneau	8	53
Kewaunee	8	21
La Crosse	5	46
Lafayette	4	14
Langlade	8	37
Lincoln	7	21
Manitowoc	9	41

County	Number of Permits	Harvest
Marathon	16	170
Marinette	20	183
Marquette	17	165
Milwaukee	1	0
Monroe	21	98
Oconto	5	23
Oneida	4	17
Outagamie	26	83
Ozaukee	2	10
Pepin	0	0
Pierce	2	10
Polk	9	43
Portage	9	128
Price	14	111
Racine	0	0
Richland	8	98
Rock	3	10
Rusk	13	96
Saint Croix	11	80
Sauk	11	117
Sawyer	6	46
Shawano	11	129
Sheboygan	1	0
Taylor	15	106
Trempealeau	6	97
Vernon	43	172
Vilas	3	19
Walworth	3	18
Washburn	2	26
Washington	7	32
Waukesha	7	15
Waupaca	13	102
Waushara	13	123
Winnebago	1	5
Wood	16	145
Total	576	3970

Table 3: Number of Agricultural Damage Shooting Permits Issued for Bear, Geese, and Turkeys in2022, by county. Source: WDNR WDACP Database.

Bear Shooting Permits					
County	Number of Permits	Reported Harvest			
Barron	3	5			
Burnett	8	13			
Iron	1	9			
Polk	1	0			
Rusk	7	4			
Sawyer	7	13			
Taylor	1				
Washburn	2	7			
Totals	30	51			

<b>Turkey Shooting Permits</b>						
County	Number of Permits	Reported Harvest				
Bayfield	1	5				
Clark	1	8				
Douglas	1	0				
Kewaunee	1	5				
Marathon	5	14				
Marinette	2	8				
Ozaukee	1	5				
Price	1	3				
Taylor	1	0				
Waukesha	1	0				
Total	15	48				

Spring Goose Shooting Permits					
County	Number of Permits	Reported Harvest			
Brown	1	10			
Calumet	2	3			
Columbia	4	30			
Dane	2	9			
Dodge	15	142			
Fond du Lac	2	0			
Jefferson	3	3			
Kewaunee	9	24			
Manitowoc	7	8			
Marathon	1	0			
Oconto	1	0			
Outagamie	2	0			
Polk	1	0			
Portage	2	0			
Price	2	0			
Rock	2	0			
Rusk	3	11			
Saint Croix	1	15			
Sawyer	1	0			
Shawano	4	0			
Sheboygan	8	5			
Taylor	2	10			
Walworth	1	0			
Washington	3	42			
Waukesha	1	0			
Waupaca	1	0			
Waushara	1	0			
Winnebago	1	6			
Wood	1	0			
Total	84	318			

» No shooting permits were issued in counties not listed above for the species mentioned.

 Table 4: Number of bears trapped and translocated by county in response to damages to agricultural crops, apiaries and livestock in 2022.

 Source: USDA-Wildlife Services.

	# of Bear
County	Translocated
Ashland	6
Barron	4
Bayfield	21
Burnett	14
Douglas	4
Dunn	1
Iron	36
Langlade	8
Marinette	16
Polk	12
Portage	2
Price	15
Rusk	85
Sawyer	152
Taylor	16
Washburn	33
Total	425

Table 5: Abatement measures [other than shooting permits (Tables 2 and 3), bear trapping (Table 4), and permanent deer barrier fences (Table 7)] prescribed for producers who enrolled in the WDACP in 2022. Source: WDNR WDACP Database and personal communication with USDA-Wildlife Services and county wildlife damage specialists.

County	No Practical Abatement	Temporary Fencing	Harvest Crops ASAP	Repellents	Scare Devices*	Other**
Adams		1				
Ashland				1	3	
Barron		3			1	
Bayfield		1			1	
Brown	5	3	6		5	
Buffalo			1			1
Burnett			6			
Calumet		1			2	
Chippewa		1			1	
Clark		2			1	1
Columbia		10			6	
Crawford		1				
Dane		3			2	
Dodge		5			5	

County	No Practical Abatement	Temporary Fencing	Harvest Crops ASAP	Repellents	Scare Devices*	Other**
Door	1	1		4	3	
Douglas		1			2	
Dunn		3				
Eau Claire		1			_	
Florence		1				
Fond du Lac		2			3	
Forest						
Grant					_	
Green		1			1	
Green Lake						
Iowa						
Iron						
Jackson	1	1		2	1	1
Jefferson					4	
Juneau		1				
Kenosha						•
Kewaunee					9	
La Crosse						
Lafayette		1				
Langlade		1			_	
Lincoln		5				
Manitowoc		1			7	
Marathon		32			30	
Marinette		3			_	
Marquette						
Menominee		I	I			
Milwaukee		1				1
Monroe		4				
Oconto		1				
Oneida		7			6	
Outagamie		6		1	3	
Ozaukee					1	1
Pepin		1				
Pierce		6				
Polk		3			2	
Portage		2			1	
Price		5			4	2
Racine						
Richland						
Rock					2	
Rusk		5			7	4
St Croix		1	1		1	

County	No Practical Abatement	Temporary Fencing	Harvest Crops ASAP	Repellents	Scare Devices*	Other**
Sauk						
Sawyer		4			4	1
Shawano		2			4	
Sheboygan						
Taylor		10			3	1
Trempealeau						
Vernon		14			1	
Vilas		1				
Walworth					1	
Washburn						
Washington		3			1	1
Waukesha		1			1	
Waupaca		1				
Waushara					1	
Winnebago						1
Wood			3		1	
Total	7	164	17	8	131	15

\* Includes cannons, pyrotechnics, guard dogs, flagging and other scare devises. \*\* Includes but not limited to tree guards, cage enclosures, feeding silage as soon as possible, silage bag covers, federal depredation permits, changing planting locations or locations of stored feed and harassment.

 Table 6: Eight-foot high-tensile woven-wire deer and/or elk barrier fence projects completed in 2022.
 Source: WDNR WDACP Database and personal communication with USDA-Wildlife Services and county

 wildlife damage specialists.

County	Crops Protected	Liner Feet of Fencing	Program Obligation	Protected Acres
Wood	Cranberries	6,095	\$40,575.00	50
St Croix	Vegetables/Fruit	2,200	\$13,950.00	7
Adams	Cranberries	5,673	\$31,125.00	40
Washington	Nursery Stock	4,288	\$19,950.00	25
Marinette	Stored Feed	1,795	\$13,275.00	2.5
Langlade	Christmas Trees	3,900	\$19,350.00	19.1
Wood	Cranberries	15,102	\$74,925.00	220
Taylor	Vegetables	4,639	\$25,125.00	21
	Total	43,692	\$238,275.00	384.6