

**NJDEP Division of Fish and Wildlife  
Office of Fish and Wildlife Health and Forensics**

**2019-2020 CWD Survey**

Retropharyngeal lymph node samples were collected from **1,091** hunter-killed deer from 6 participating butchers as part of the 2019-2020 statewide CWD surveillance effort. Of the hunter harvested deer 54% were female, 46% were male, 3 were not recorded (Table 1; Figures 3 and 4). In addition to hunter killed deer, **8** wild white-tailed deer, 6 males and 2 females, with clinical signs were opportunistically tested for CWD throughout the year (July 1, 2019 – June 30, 2020). In total **1,099** wild white-tailed deer were sampled in this survey bringing the current total of wild deer sampled in New Jersey from 1997-2020 to **9,129**.

The top three DMZ's sampled this year included Zone 12 with 191 samples, Zone 8 with 125 samples, and Zone 14 with 65 samples (Table 2). Of the 21 counties, Hunterdon with 298, Somerset with 158 and Burlington with 111, had the largest sample sizes (Figure 2). Hudson County was the only county not represented. Figure 2 shows the number of deer sampled this season based on county and DMZ.

The age of deer is an important consideration for CWD surveillance since older individuals more are more likely to be infected due to the long incubation period of the CWD prion. Fawns, or deer less than 1.5 years old, were not sampled. In order to consider age in the survey, deer were given scores from 1 to 3 for age groups 1.5, 2.5, and 3.5 respectively. In this year's survey 27% had an age-weighted score of 1, 38% had an age-weighted score of 2, 35% had an age-weighted score of 3, and 16 were not recorded. These age-weighted scores are shown by county in Figure 1. The top 3 counties with the most deer with scores of 3 included Hunterdon with 109, Somerset with 69, and Burlington with 34.

A total of 2 captive deer, including a male Sika deer and a female elk, were collected for CWD testing statewide. This brings the total number of captive deer tested in NJ since 1997 to 151 white-tailed deer, 7 elk, 2 reindeer, 4 red deer, 1 sika deer and 3 axis deer, all of which tested negative.

This year, no deer harvested out of state were tested.

Table 1: Breakdown of Total Deer Sampled by County and Sex

<b>County</b>	<b>Female/Male/Unk</b>	<b>Total</b>
Atlantic	16/14/0	30
Bergen	3/2/0	5
Burlington	67/44/0	111
Camden	18/28/0	46
Cape May	0/1/0	1
Cumberland	1/1/0	2
Essex	12/5/1	18
Gloucester	42/33/0	75
Hunterdon	140/158/0	298
Mercer	47/9/0	56
Middlesex	12/3/0	15
Monmouth	42/4/0	46

Morris	38/48/0	86
Ocean	18/13/0	31
Passaic	1/5/1	7
Salem	25/10/0	35
Somerset	69/89/0	158
Sussex	8/10/0	18
Union	12/2/0	14
Unknown	12/5/1	18
Warren	5/16/0	21
<b>Total number of hunter-killed deer sampled</b>	<b>588 females/500 males/3 unknown</b>	<b>1.091</b>
<b>Number of non-hunter killed deer samples</b>	<b>2 female / 6 male Clinical (Wild) 1 female Elk / 1 male Sika deer</b>	<b>10</b>

Table 2: Age-weighted scores by DMZ

DMZ	Age-weighted scores			Total
	1	2	3	
1	1	0	0	1
2	5	1	4	10
3	0	4	2	6
4	1	0	0	1
5	5	0	2	7
6	6	7	2	15
7	7	16	10	33
8	25	44	53	122
9	2	14	8	24
10	9	16	22	47
11	6	22	15	43
12	43	72	71	186
13	15	14	21	50
14	15	32	17	64
15	4	2	2	8
16	2	3	1	6
17	8	9	7	24
18	2	5	1	8
19	16	18	16	50
21	3	5	9	17
23	7	13	13	33
24	0	0	2	2
25	12	6	7	25
26	0	7	6	13
27	8	7	0	15
28	3	1	1	5
29	1	0	1	2
31	0	0	1	1
34	0	0	1	1
35	13	19	19	51
36	7	7	14	28
37	0	4	1	5
38	1	2	2	5
39	1	0	0	1
41	10	8	4	22
42	0	1	1	2
45	1	0	0	1
46	0	1	0	1
47	0	2	0	2
48	10	12	0	22
49	13	10	9	32
50	3	10	6	19
51	2	4	5	11
55	1	1	3	5
60	1	0	0	1
63	0	2	1	3
64	2	0	0	2
65	1	2	3	6
66	7	1	2	10
Total	279	404	365	1,048

Figure 1: Age-weighted score by county (left) and DMZ (right)

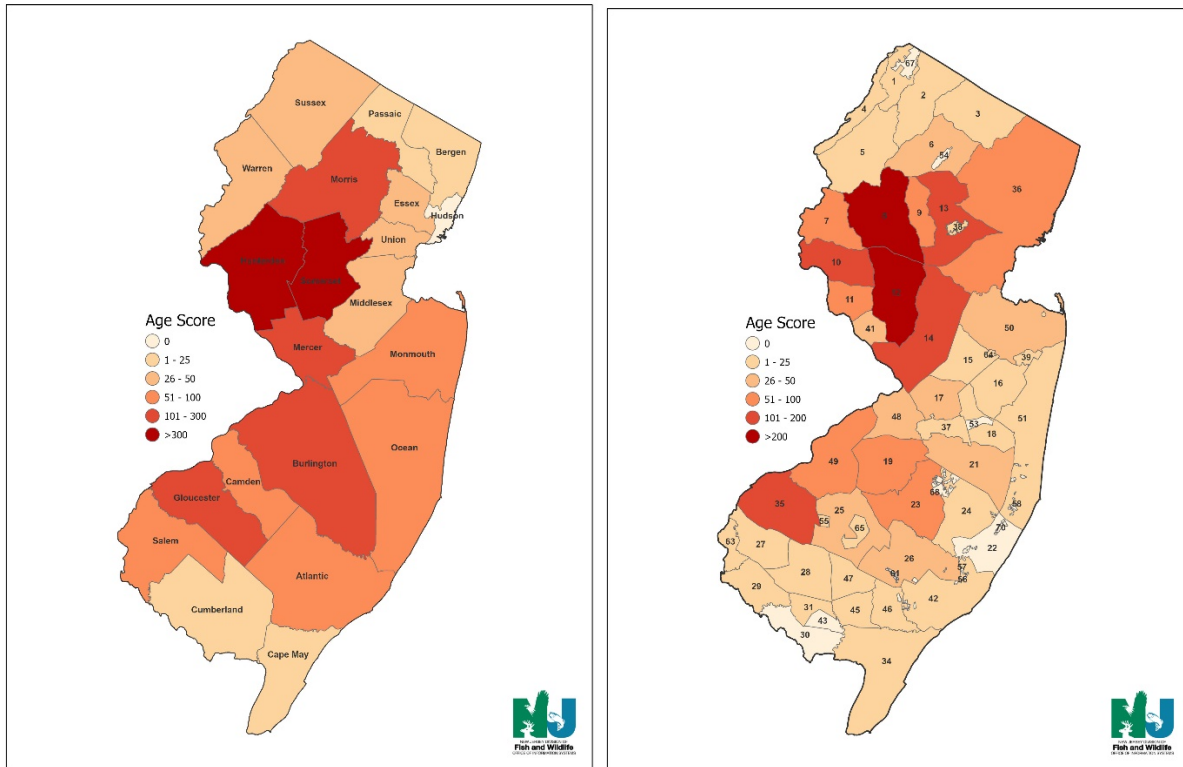


Figure 2: Number of samples collected by County (left) and DMZ (right)

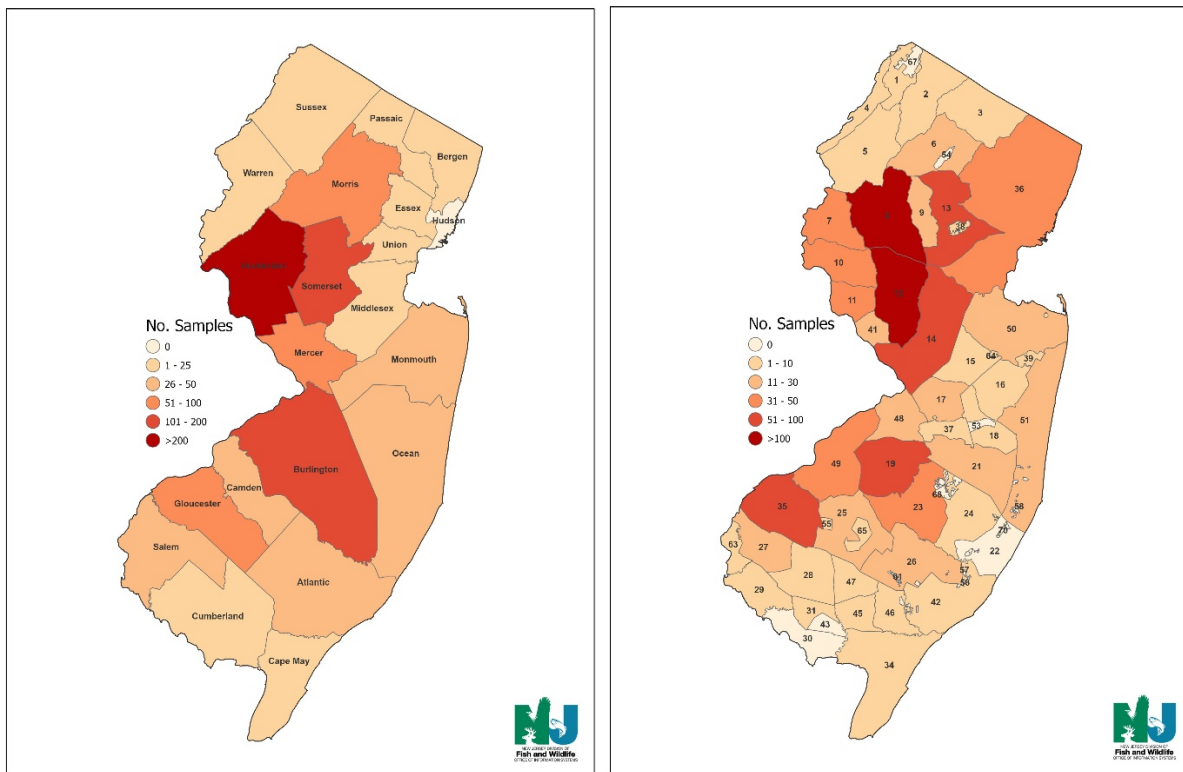


Figure 3: Number of females (left) and males (right) sampled by county

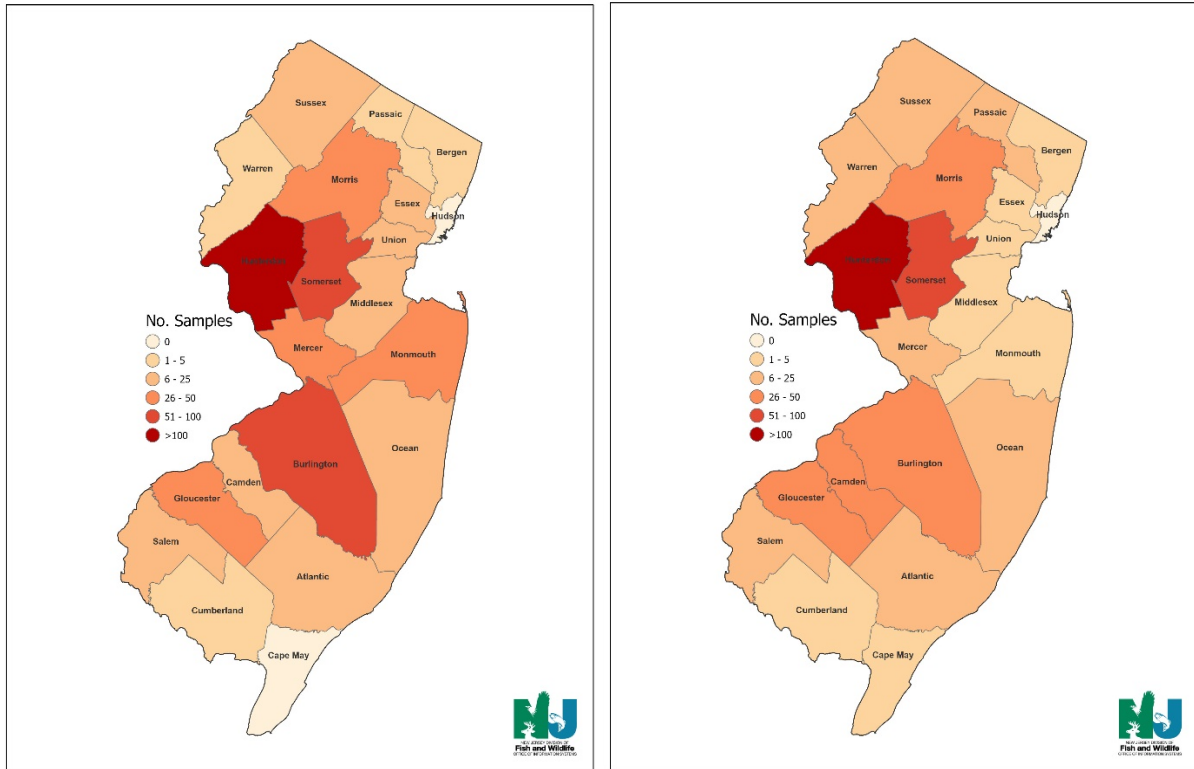


Figure 4: Number of females (left) and males (right) sampled by DMZ

