

## 2020-2021 CWD Survey

Retropharyngeal lymph node samples were collected from **705** hunter-killed deer from 4 participating butchers as part of the 2020-2021 statewide CWD surveillance effort. Of the hunter harvested deer 53% were female, 47% were male (Table 1; Figures 1 and 2). In addition to hunter killed deer, **8** wild white-tailed deer, 5 males and 3 females, with clinical signs were opportunistically tested for CWD throughout the year (July 1, 2020 – February 2, 2021), all were negative. In total **712** wild white-tailed deer were sampled in this survey bringing the current total of wild deer sampled in New Jersey from 1997-2020 to **9,842**.

The top three DMZ's sampled this year included Zone 12 with 127 samples, Zone 8 with 101 samples, and Zone 10 with 48 samples (Table 2). Of the 21 counties, Hunterdon with 208, Somerset with 145 and Morris with 56, had the largest sample sizes (Figure 3). Hudson County was the only county not represented. Figure 3 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 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, 36% had an age-weighted score of 2, 37% had an age-weighted score of 3. These age-weighted scores are shown by county in Figure 4. The top 3 counties with the most deer with scores of 3 included Hunterdon with 80, Somerset with 63, and Morris with 23.

A total of 5 captive deer, from one white-tailed deer facility, were collected for CWD testing statewide. This brings the total number of captive deer tested in NJ since 1997 to 156 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

County	Female/Male	Total
Atlantic	12/7	19
Bergen	1/2	3
Burlington	24/28	52
Camden	3/15	18
Cape May	1/0	1
Cumberland	38/3	41
Essex	0/1	1
Gloucester	15/21	36
Hunterdon	99/109	208
Mercer	6/7	13
Middlesex	9/2	11
Monmouth	7/2	9
Morris	31/25	56
Ocean	6/3	9
Passaic	2/2	4

Salem	10/13	31
Somerset	74/71	145
Sussex	12/9	21
Union	7/3	10
Warren	8/9	17
<b>Total number of hunter-killed deer sampled</b>	<b>373 females/332 males</b>	<b>705</b>
<b>Number of non-hunter killed deer samples</b>	<b>3 female / 4 male Clinical (Wild) 5 captive cervids (WTD)</b>	<b>12</b>

Table 2: Age-weighted scores and total number of deer sampled by DMZ

Zone	Age Score (1-3)			Total
	1	2	3	
1	1	0	2	3
2	8	2	0	10
3	1	1	1	3
4	1	0	1	2
5	2	6	3	11
6	5	4	6	15
7	4	6	4	14
8	24	39	38	101
9	2	11	10	23
10	8	20	20	48
11	5	12	7	24
12	24	46	57	127
13	4	19	20	43
14	8	13	13	34
15	0	0	3	3
16	2	1	0	3
17	3	2	1	6
18	1	1	1	3
19	13	9	10	32
21	3	1	1	5
22	0	1	1	2
23	5	3	6	14
24	0	0	1	1
25	8	2	5	15
26	2	3	9	14
27	3	4	1	8
28	15	9	11	35
29	4	4	1	9
30	1	1	2	4
31	1	1	2	4
34	0	2	1	3
35	5	8	3	16
36	5	10	6	21
39	1	0	1	2
41	4	3	1	8
42	2	0	1	3
46	1	0	0	1
47	0	2	3	5
48	1	0	0	1
49	6	6	2	14
50	0	0	2	2
51	0	1	0	1
53	0	0	1	1
55	2	0	0	2
63	0	1	0	1
65	2	2	2	6
68	1	1	0	2
Total	188	257	260	705

Figure 1: Number of females (left) and males (right) sampled by county

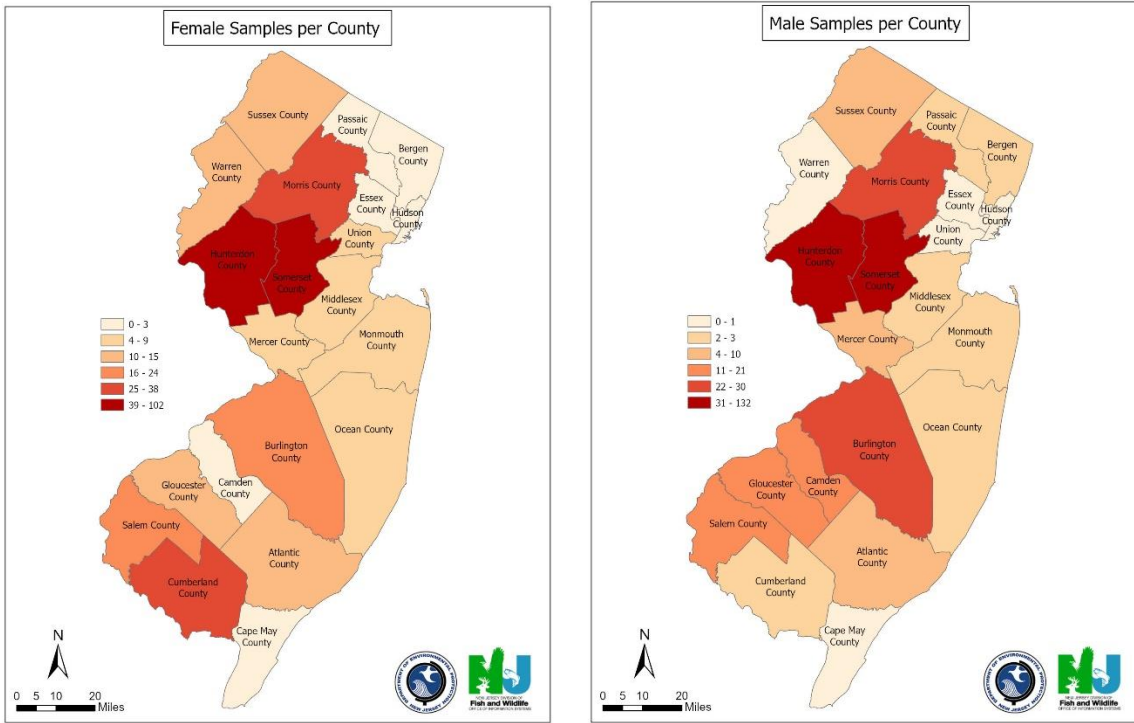


Figure 2: Number of females (left) and males (right) sampled by DMZ

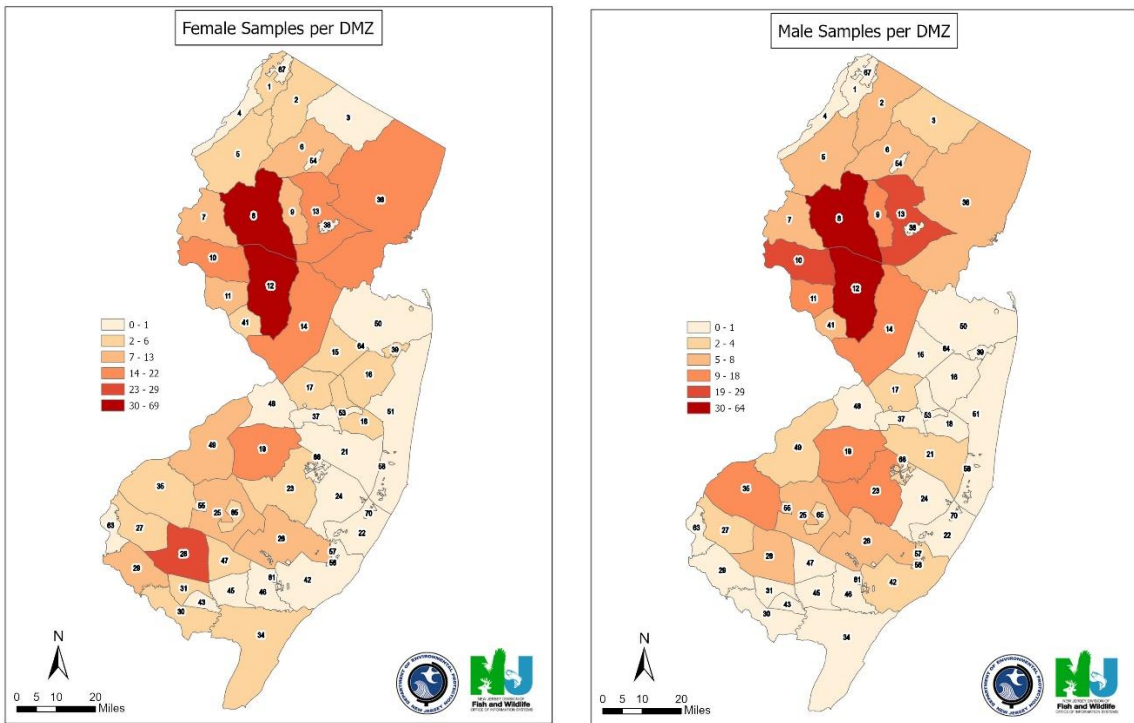


Figure 3: Number of samples collected by County (left) and DMZ (right)

