

MICHIGAN DEPARTMENT OF CONSERVATION
Game Division

Report No. 2247
May 23, 1960

1958 Bear Hunter Survey
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For the past five years,¹ the Cusino Wildlife Experiment Station has conducted a questionnaire survey of a number of supposedly successful bear hunters. The 1954 data was considered too meager to be included in this report. Names and addresses were obtained in the field, at locker plants, deer checking stations, from hunting and car license numbers, and from licensed taxidermists. Hunters contacted were only a portion of those who were successful. For estimates of the total kill, see Game Division Report No. 2240. The following analyses are based only on the results of the questionnaires.

We mailed 679 questionnaires in 1958. Completed questionnaires totaled 518 (76 per cent). One questionnaire was thrown out as it reported a bear killed in 1957. Twenty-eight questionnaires were non-deliverable and 133 were not returned. A maximum of three reminders were mailed to non-respondents.

Thirty-five hunters reported that they did not kill a bear, but the remaining 463 hunters reported killing 536 bears. Forty of these must be considered illegal, because although the regulations allow only one bear per hunter per year, 15 hunters reported killing 39, or 24 illegal ones; in addition, 13 hunters reported killing 16 bears out of season. Two bears were reported killed on damage complaints, and 17 were killed out of state (1 in Maine, 16 in Canada).

Twenty-five additional bears were reported by respondents to have been killed, but questionnaires mailed to those bear hunters who reportedly killed them were not returned. This leaves a known legal Michigan hunting kill of 452 bears.

Twenty-seven per cent of the reported legal kill was taken in the September 1-15 season, 27 per cent in the October 1 - November 5 season, and 46 per cent were killed during the deer season November 15-30.

Of 244 bears reported taken during the September and October seasons, 53 (22 per cent) were taken with dogs. This is 12 per cent of the reported legal Michigan kill. The illegal kill (during and out of season), totaled 40, or 9 per cent as large as the reported legal Michigan hunting kill.

¹The data for 1954-57 were collected by A. W. Erickson under P.R. Project W-70-R-10

Breakdown of Bear Kill 1955-58

| <u>Year</u> | <u>Known kill</u> | <u>Sept. 1-15*</u> | | <u>Oct. 1-Nov. 5</u> | | <u>Nov. 15-30</u> | | <u>Upper Peninsula</u> | | <u>Lower Peninsula</u> | |
|-------------|-----------------------|--------------------|-----------------|----------------------|-----------------|-------------------|-----------------|------------------------|-----------------|------------------------|-----------------|
| | | <u>No.</u> | <u>Per cent</u> | <u>No.</u> | <u>Per cent</u> | <u>No.</u> | <u>Per cent</u> | <u>No.</u> | <u>Per cent</u> | <u>No.</u> | <u>Per cent</u> |
| 1955 | 175 | 16 | 9.1 | 44 | 25.1 | 115 | 65.7 | 128 | 73.1 | 47 | 26.9 |
| 1956 | 394 | 42 | 10.7 | 60 | 15.2 | 292 | 74.1 | 287 | 72.8 | 107 | 27.2 |
| 1957** | 412 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1958*** | 452 | 123 | 27.2 | 121 | 26.8 | 208 | 46.0 | 378 | 83.6 | 74 | 16.4 |

* Upper Peninsula only: 1955 season in Chippewa County only.

** Further breakdown of 1957 set of data is not available at present.

*** See map for kill by counties.

Nine bears were reported taken with bow and arrow. Sixteen (3 per cent) of the total verified Michigan kill (494) were tagged animals (total includes 40 illegal and 2 nuisance animals)

The figures in the following paragraphs include data from all reported Michigan kills; legal, illegal, and nuisance, for which a questionnaire was returned (466).

The sex of 18 bears and ages of 3 bears was not indicated. One bear was not identified as to sex or age. As in all previous surveys there was a preponderance of males in the kill. Males (191) comprised 56 per cent of the adult animals (342). Male cubs (31) comprised 53 per cent of the 58 cubs that were killed and for which sex was indicated. Males comprised 54.5 per cent of all ages (including 30 yearlings) compared with 56.8 per cent and 59.2 per cent in 1955 and 1956, respectively. Data for 1957 is not available at present.

"Family" groups involved in the 1958 kill totaled 93. A total of 163 bears were shot from these "family" groups. This is 36 per cent of the total reported legal kill. In 17 instances (18 per cent) the entire "family" group was killed. (See table below for breakdown of "family" groups and comparison with previous years.) Five men involved in shooting part of "family" groups did not indicate this on their questionnaire. Two family groups of 6 bears and 2 groups of 7 bears were reported. One "family" group was composed of 1 adult male and 1 cub. There were 17 adult males included in these "family" groups.

The 37 bears shot in dens during deer season amounted to 18 per cent of the reported November 15-30 kill. Three bears were also shot in dens during the October 1-November 5 season; a total of 40 bears killed in dens. This is only 9 per cent of the total legal hunting kill. (See table)

Young of the year (65) made up 14.4 per cent of the 1958 legal hunting kill, compared with 19.9 per cent in 1955 and 18.7 per cent in 1956.

Family Groups

| <u>Year</u> | <u>No. "Family" groups</u> | <u>Reported kill</u> | <u>Per cent of repor- ted kill</u> | <u>Per cent adults killed</u> | <u>Per cent cubs killed</u> | <u>Cubs per adult female</u> |
|-------------|------------------------------------|--------------------------|--|---------------------------------------|-------------------------------------|--------------------------------------|
| 1955 | 39 | 175 | 22.3% | 64% | 38% | 2.00 |
| 1956 | 62 | 394 | 15.7% | 58% | 64% | 1.81 |
| 1957* | -- | 412 | -- | -- | -- | -- |
| 1958 | 93 | 452 | 20.6% | 65% | 38% | 1.88 |

*Further breakdown of 1957 set of data is not available at present.

Bears Killed in Dens

| <u>Year</u> | <u>No.</u> | <u>Reported kill</u> | <u>Per cent of repor- ted kill</u> | <u>Per cent adult males kill in dens</u> | <u>Per cent adult females killed in dens</u> |
|-------------|------------|--------------------------|--|--|--|
| 1955 | 63 | 175 | 36% | 21% | 60% |
| 1956 | 63 | 394 | 16% | 14% | 24% |
| 1957* | -- | -- | -- | -- | -- |
| 1958 | 40** | 452 | 9% | 16% | 28% |

*Further breakdown of 1957 set of data is not available at present.

**Includes 3 bears killed in dens in October 1-November 5 season.

SUMMARY OF REPORTED BEAR KILL

| | Sept. 1-15 | Oct. 1- Nov. 5 | Nov. 15-30 | Totals |
|-----------------|---------------|-------------------|---------------|------------|
| Upper Peninsula | 123 | 81 | 174 | 378 |
| Lower Peninsula | Sea- son | 40 | 34 | 74 |
| Totals | 123 | 121 | 208 | 452 |

*From returns of questionnaires sent to known bear hunters. This is NOT a breakdown of the TOTAL bear kill.

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