Annual Mammal Survey
2018
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Abstract

Annual mammal surveys are used as an index to species distribution and abundance. For the 2018 Annual Mammal Survey, numbers of black bear, bobcat, and fisher per respondent were above long-term averages. Numbers of American marten, badger, coyote, gray fox, gray wolf, jack rabbit, red fox, and river otter per respondent were below long-term averages. Long-term averages represent observations over the thirty-one year period of 1987-2017. Additionally, responses by field personnel in the 2018 Annual Mammal Survey decreased 22% from the 2017 level.

Methods

Wildlife Survey materials were sent to regional land leaders with the instruction to distribute the survey forms to all field personnel in their region. The annual Mammal Survey was sent out with the Ten-Week Brood Survey. Field personnel were asked to record the number of eleven mammal species, namely, American martens, badgers, black bears, bobcats, coyotes, fishers, gray foxes, gray wolves, jack rabbits, red foxes, and river otters observed by them while doing normal field operations during the past year. Field personnel were asked to report live sightings as well as road kills. All species have appeared on the annual mammal survey since 1987 except for gray wolves, which were added in 1997. Numbers per respondent were used because the number of observers changes from year to year. The number of respondents, however, underestimates the number of observers because field personnel did not fill out the survey if they sighted none of the mammals listed. Long-term averages are based on observations from the thirty-one year period of 1987-2017.

Results

Eighty-two (82) surveys contained observations of mammals in 2018. Since 1987, respondents have averaged 164 surveys per year. The number of surveys returned in 2018 represents a 22% decrease from the 2017 response of 105 surveys.

American Marten
No American marten were observed in 2018, the long-term average is 0.011 (Figure 1).

Badger
Twelve field personnel observed 17 badgers in 2018. Ten (10) observations were live sightings and 7 observations were road kills. Badgers per respondent numbered 0.21 in 2018, which is lower than the long-term average of 0.57 (Figure 2).

Black Bear
Forty-nine field personnel observed 344 black bears in 2018. Three hundred and twenty-four (324) observations were live sightings and 20 were road kills. Black bears per respondent numbered 4.20 in 2018, which is above the long-term average of 2.91 black bears per respondent (Figure 3).
Bobcat
Sixteen field personnel observed 26 bobcats in 2018. Twenty-three (23) observations were live sightings and 3 were road kills. Bobcats per respondent numbered 0.32 in 2018, which is above the long-term average of 0.18 bobcats per respondent (Figure 4).

Coyote
Fifty-two personnel observed 199 coyotes in 2018. One hundred and fifty-eight (158) were live sightings and 41 were road kills. Coyotes per respondent numbered 2.43, which is below the long-term average of 2.61 coyotes per respondent (Figure 5).

Fisher
Fourteen field personnel observed 25 fishers in 2018. Twenty (20) were live sightings and 5 were road kills. Fishers per respondent numbered 0.30 in 2018, which is below the long-term average of 0.73 fishers per respondent (Figure 6).

Gray Fox
Eleven field personnel observed 20 gray foxes in 2018. Nine (9) were live sightings and 11 were road kills. Gray fox per respondent numbered 0.24 in 2018, which is below the long-term average of 0.45 gray fox per respondent (Figure 7).

Gray Wolf
Ten field personnel observed 26 gray wolves in 2018. Twenty-four (24) were live sightings and 2 were road kill. Gray wolves observed per respondent numbered 0.32 in 2018, which is below the long-term average of 0.51 (Figure 8).

Jack Rabbit
No jack rabbits were observed in 2018, the long-term average is 0.02 (Figure 9).

Red Fox
Fifty-three field personnel observed 209 red foxes in 2018. One hundred and seventy (170) were live sightings and 39 were road kills. Red fox observed per respondent was 2.55 in 2018, which is below the long-term average of 4.04 red fox per respondent (Figure 10).

River Otter
Twenty-one field personnel observed 91 river otters in 2018. Eighty-two (82) were live sightings and 9 were road kills. River otters observed per respondent in 2018 was 1.11, which is below the long-term average of 1.88 otters per respondent (Figure 11).
Figure 1. Number of American martens seen per respondent 1987-2018.

Figure 2. Number of badgers seen per respondent 1987-2018.
Figure 3. Number of black bears seen per respondent 1987-2018.

Figure 4. Number of bobcats seen per respondent 1987-2018.
Figure 5. Number of coyotes seen per respondent 1987-2018.

Figure 6. Number of fishers seen per respondent 1987-2018.
**Figure 7.** Number of gray foxes seen per respondent 1987-2018.

**Figure 8.** Number of gray wolves seen per respondent, 1997-2018.
Figure 9. Number of jack rabbits seen per respondent 1987-2018.

Figure 10. Number of red foxes seen per respondent 1987-2018.
Figure 11. Number of river otters seen per respondent 1987-2018.