Annual Mammal Survey
2017
By Jessica Kitchell

Abstract

Annual mammal surveys are used as an index to species distribution and abundance. For the 2017 Annual Mammal Survey, numbers of black bear, bobcat, and coyote per respondent were above long-term averages. Numbers of American marten, badger, fisher, 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 year period of 1987-2016. Additionally, responses by field personnel in the 2017 Annual Mammal Survey decreased 6% from the 2016 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 year period of 1987-2016.

Results

One hundred and five (105) surveys contained observations of mammals in 2017. Since 1987, respondents have averaged 167 surveys per year. The number of surveys returned in 2017 represents a 6% decrease from the 2016 response of 112 surveys.

American Marten
No American marten were observed in 2017, the long-term average is 0.011 (Figure 1).

Badger
Twenty-three field personnel observed 29 badgers in 2017. Nineteen (19) observations were live sightings and 10 observations were road kills. Badgers per respondent numbered 0.28 in 2017, which is lower than the long-term average of 0.58 (Figure 2).

Black Bear
Sixty-three field personnel observed 341 black bears in 2017. Three hundred (300) observations were live sightings and 41 were road kills. Black bears per respondent numbered 3.25 in 2016, which is above the long-term average of 2.90 black bears per respondent (Figure 3).
Bobcat
Twenty field personnel observed 35 bobcats in 2017. Twenty-seven (27) observations were live sightings and 8 were road kills. Bobcats per respondent numbered 0.33 in 2017, which is above the long-term average of 0.18 bobcats per respondent (Figure 4).

Coyote
Seventy-two personnel observed 363 coyotes in 2017. Two hundred and sixty-two (262) were live sightings and 101 were road kills. Coyotes per respondent numbered 3.46, which is above the long-term average of 2.56 coyotes per respondent (Figure 5).

Fisher
Twenty-five field personnel observed 45 fishers in 2017. Thirty-four (34) were live sightings and 11 were road kills. Fishers per respondent numbered 0.43 in 2017, which is below the long-term average of 0.74 fishers per respondent (Figure 6).

Gray Fox
Twenty-one field personnel observed 46 gray foxes in 2017. Thirty-three (33) were live sightings and 13 were road kills. Gray fox per respondent numbered 0.44 in 2017, which is below the long-term average of 0.45 gray fox per respondent (Figure 7).

Gray Wolf
Twenty-five field personnel observed 44 gray wolves in 2017. Forty-one (41) were live sightings and 3 were road kill. Gray wolves observed per respondent numbered 0.42 in 2017, which is below the long-term average of 0.51 (Figure 8).

Jack Rabbit
No jack rabbits were observed in 2017, the long-term average is 0.02 (Figure 9).

Red Fox
Seventy-three field personnel observed 254 red foxes in 2017. One hundred and eighty-seven (187) were live sightings and 67 were road kills. Red fox observed per respondent was 2.42 in 2017, which is below the long-term average of 4.09 red fox per respondent (Figure 10).

River Otter
Thirty field personnel observed 169 river otters in 2017. One hundred and fifty-three (153) were live sightings and 16 were road kills. River otters observed per respondent in 2017 was 1.61, which is below the long-term average of 1.89 otters per respondent (Figure 11).
Figure 1. *Number of American martens seen per respondent 1987-2017.*

Figure 2. *Number of badgers seen per respondent 1987-2017*
Figure 3. *Number of black bears seen per respondent 1987-2017.*

Figure 4. *Number of bobcats seen per respondent 1987-2017.*
Figure 5. Number of coyotes seen per respondent 1987-2017.

Figure 6. Number of fishers seen per respondent 1987-2017.
Figure 7. Number of gray foxes seen per respondent 1987-2017.

Figure 8. Number of gray wolves seen per respondent, 1997-2017.
Figure 9. *Number of jack rabbits seen per respondent 1987-2017.*

Figure 10. *Number of red foxes seen per respondent 1987-2017.*
Figure 11. Number of river otters seen per respondent 1987-2017.