

SUPPLEMENTARY MATERIAL 1. Capture records presented in Benedict et al. 2020.

Eptesicus fuscus (only select records described)

Adams County (Geographic and Reproductive Records): 2 postlactating females, 11 juvenile females, and 5 juvenile males released 22 July 2010 (private property along East Nodaway River, 1.7 miles S, 5.1 miles W Corning P.O.; N40°57'58.0", W94°50'08.0"); 2 postlactating females, 2 juvenile females, and 1 juvenile male released 26 July 2010 (private property, 5.9 miles S, 7.0 miles W Corning P.O.; N40°54'21.7", W94°52'04.8").

Chickasaw County (Geographic and Reproductive Records): 2 adult males released 12 June 2017, 2 lactating females, 1 postlactating female, and 2 adult males released 18 July 2017 (Wapsi Access Area, 2.5 miles N, 7.8 miles W New Hampton P.O.; N43°06'02.17", W92°28'17.67"); 1 adult male released 12 June 2017, 1 pregnant female and 1 lactating female released 13 June 2017 (Twin Ponds County Park, 3.6 miles S, 3.8 miles W New Hampton P.O.; N43°00'45.7", W92°23'15.9"); 1 adult male released 13 June 2017 (Upper Wapsi Access Area, 6.7 miles S, 2.0 miles W New Hampton P.O.; N42°57'52.0", W92°21'25.8").

Clarke County (Geographic and Reproductive Records): total of 231 individuals released including 74 lactating females, 10 postlactating females, 5 nonreproductive adult females, 40 adult males, and 101 juveniles (31 males, 27 females, 43 sex unknown) captured during 19 nights of netting in late June and early July 2007, late July and early August 2009, and late June and mid-July 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00.075', W93°48.184').

Clinton County (Reproductive Record): 1 juvenile female and 3 adult males released 19 July 2018 (Sherman Park, 3.2 miles S, 1.5 miles W Calamus P.O.; 41.77872, -90.78658).

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Dallas County (Geographic and Reproductive Records; additional 10 nonreproductive individuals captured, not described below): 2 lactating females, 1 nonreproductive adult female, and 3 adult males released 30 June 2010, 1 adult male released 9 July 2010 (private property, 1.2 miles S, 1.2 miles E De Soto P.O.; N41°30'55.7", W93°59'19.1"); 2 postlactating females, 1 juvenile female, 1 nonreproductive female, 1 juvenile male, and 1 adult male released 28 July 2010 (private property on Sugar Creek, 2.5 miles N, 1.1 miles E Booneville P.O.; N41°33'44.7", W93°51'45.9"); 5 adult males released 8 June 2011, 5 adult males released 16 June 2011, 1 adult male released 17 June 2011, 6 adult males released 21 June 2011 (private property, 0.1 miles S, 2.5 miles E Booneville P.O.; N41°31'09.9" and W93°50'20.2"); 1 pregnant female and 1 nonreproductive adult female released 24 May 2013 (private property along Sugar Creek, 2.2 miles N, 1.7 miles E Booneville P.O.; N41°33'33.2", W93°51'23.0"); 2 pregnant females released 27 May 2013, 2 pregnant females released 28 May 2013 (private property along Sugar Creek, 2.4 miles N, 1.7 miles E Booneville P.O.; N41°33'32.9", W93°51'06.5").

Davis County (Geographic and Reproductive Records): 1 adult male released 26 June 2012, 1 juvenile male and 2 adult males released 11 July 2012 (private property, 10.0 miles N, 0.3 miles W Bloomfield P.O.; N40°53'56.0", W92°24'28.2"); 1 juvenile female and 3 adult males released 28 June 2012 (private property, 5.6 miles N, 0.8 miles E Bloomfield P.O.; N40°50'03.4", W92°23'52.4"); 1 postlactating female, 2 juvenile females, and 4 adult males released 3 July 2012 (private property along North Chequest Creek, 5.7 miles N, 0.7 miles E Bloomfield P.O.; N40°50'09.5", W92°24'03.2").

Decatur County (Reproductive Records): 7 lactating females, 1 postlactating female, 3 juvenile females, 3 juvenile males, and 1 adult male released 5 July 2006, 5 lactating females, 10

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postlactating females, 4 juvenile females, 1 nonreproductive adult female, 2 juvenile males, and 2 adult males released 21 July 2006 (private property, 1 mile S, 5 miles E Leon P.O.; T69N, R24W, sec 31 SE ¼ of SE ¼); 13 lactating females, 5 nonreproductive adult females, 12 juvenile females, 16 juvenile males, and 7 adult males released 6 July 2006 (private property, 1.0 mile S, 5.6 miles E Leon P.O.; T69N, R24W, sec 32 SE ¼ of SW ¼); 12 lactating females, 8 postlactating females, 11 juvenile females, 13 juvenile males, and 3 adult males released 7 July 2006 (private property, 3.9 miles N, 1.6 miles E Leon P.O.; T69N, R25W, sec. 10 NW ¼ of NE ¼); 1 lactating female, 5 postlactating females, 3 juvenile females, 3 juvenile males, and 2 adult males released 20 July 2006 (private property, 4 miles N, 1.3 miles E Leon P.O.; T69N, R25W, Sec. 3 SW ¼).

Des Moines County (Reproductive Records): 8 lactating females, 3 postlactating females, 1 juvenile female, 1 juvenile male, and 2 adult males released 8 July 2011, 1 postlactating female, 2 juvenile females, 1 juvenile male, and 2 adult males released 17 July 2011, 1 lactating female and 3 adult males released 7 July 2014, 1 lactating female, 1 nonreproductive adult female, 2 juvenile females, 2 juvenile males, and 4 adult males released 8 July 2014, 5 lactating females, 1 juvenile male, and 2 adult males released 10 July 2014 (Big Hollow Recreation Area, central location—4.0 miles S, 3.2 miles W Mediapolis P.O.; N40°57'04.8", W91°13'38.0"); 2 postlactating females, 1 juvenile female, and 1 adult male released 21 June 2012 (private property, 2.7 miles N, 0.2 miles W West Burlington P.O.; N40°51'54.1", W91°09'50.5"); 1 postlactating female, 1 juvenile male, and 4 adult males released 22 June 2012 (private property, 2.8 miles N West Burlington, P.O.; N40°52'05.1", W91°09'36.1").

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Emmet County (Reproductive Records): 1 lactating female and 3 adult males released 1 July 2015 (Fort Defiance State Park, 1.0 miles S, 1.4 miles W Estherville P.O.; N43°23'36.7", W94°51'32.5"); 1 postlactating female and 2 adult males released 2 July 2015 (private property, 1.0 miles S, 0.4 miles W Estherville P.O.; N43°23'34.7", W94°50'42.5").

Floyd County (Geographic and Reproductive Records): 2 nonreproductive adult females released 14 June 2017 (Colwell Park, 1.8 miles N, 4.6 miles E Floyd P.O.; N43°09'15.3", W92°38'36.6"); 1 pregnant female and 2 adult males released 15 June 2017 (Mather Woods, 0.8 miles S, 0.6 miles E Nora Spring P.O.; N43°07'55.2", W92°59'37.8"); 1 pregnant female and 1 adult male released 15 June 2017 (Happy Acres, 3.9 miles N, 2.4 miles E Marble Rock P.O.; N43°01'12.5", W92°49'24.5"); and 2 lactating females and 1 adult male released 15 June 2017 (Ackley Creek, 0.7 miles S, 0.3 miles W Marble Rock P.O.; N42°57'05.7", W92°52'35.4").

Franklin County (Geographic and Reproductive Records): 4 postlactating females, 2 juvenile females, 1 nonreproductive adult female, 2 juvenile males, and 4 adult males released 26 July 2016 (West Fork Wildlife Area, 4.1 miles N, 8.7 miles E Hampton P.O.; N42°48'06.9", W93°02'07.6"); and 1 adult male released 27 July 2016 (Ingebretson Wildlife Refuge, 0.4 miles N, 2.5 miles W Sheffield P.O.; N42°54'03.3", W93°15'45.8").

Fremont County (Geographic and Reproductive Records): 2 postlactating females and 1 juvenile male released 15 July 2010, 1 lactating female, 11 postlactating females, 9 juvenile females, 10 juvenile males, and 4 adult males released 16 July 2010 (Manti Memorial Park, 0.6 miles N, 4.1 miles E Fremont P.O.; N40°43'36.6", W95°24'06.6"); 2 juvenile females, 2 juvenile males, and 1 adult male released 15 July 2010 (Riverton Wildlife Management Area, 0.1 miles N, 0.6 miles W

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Riverton P.O.; N40°41'14.9", W95°34'43.8"); 4 postlactating females, 4 juvenile females, and 2 adult males released 16 July 2010 (Riverton Wildlife Management Area, 0.6 miles W Riverton P.O.; N40°41'14.9", W95°34'43.8").

Guthrie County (Geographic, Reproductive, and Seasonal Records; additional 4 nonreproductive individuals captured, not described below): 1 lactating female and 2 adult males released 1 July 2010, 1 adult male released 6 July 2010, 1 postlactating female, 1 juvenile female, and 1 juvenile male released 27 July 2010, 3 juvenile females released 28 July 2010, and 9 postlactating females, 5 juvenile females, and 1 adult male released 5 August 2010 (Middle Raccoon River WMA, 1.7 miles S, 0.3 miles W Panora P.O.; N41°39'59.2", W94°22'19.7"); 1 juvenile male released 7 July 2010 (Springbrook WMA, 5.5 miles N, 1.7 miles E Guthrie Center P.O.; N41°45'37.5", W94°28'07.2"); 1 juvenile female and 2 adult males released 6 August 2010 (Bennie Hall Wildlife Area, 0.4 miles S, 1.8 miles W Linden P.O.; T79N, R30W, Sec. 23 NE ¼ of SE ¼); 1 nonreproductive adult female, 2 juvenile females, 2 juvenile males, and 2 adult males released 6 August 2010 (private property, 1.7 miles S Linden P.O.; T79N, R29W, Sec. 30 SW ¼); 2 postlactating females released 8 June 2012, 2 adult males released 12 July 2013, and 5 lactating females released 20 June 2014 (Whiterock Conservancy, 3.1 miles S, 1.4 miles E Coon Rapids P.O.; N41°50'55.5", W94°39'55.4").

Hancock County (Geographic and Reproductive Records): 1 lactating female, 1 postlactating female, and 2 adult males released 30 June 2015, 2 juvenile females, 3 juvenile males, and 7 adult males released 30 July 2015 (Eagle Lake State Park, 1.6 miles N, 3.2 miles E Britt P.O.; N43°07'23.1", W93°44'25.7"); and 3 adult males released 15 August 2016 (Eldred Sherman Recreation Area, 4.4 miles S, 1.7 miles E Klemme P.O.: N42°56'35.2", W93°34'01.3").

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Humboldt County (Geographic and Reproductive Records): 1 juvenile female, 1 juvenile male, and 1 adult male released 20 July 2015 (Bradgate Wildlife Area, 1.3 miles S, 1.1 miles E Bradgate P.O.; N42°47'02.3", W94°23'40.0"); 4 postlactating females, 3 nonreproductive adult females, 2 juvenile males, and 5 adult males released 20 July 2015, 1 postlactating female and 8 adult males released 28 June 2016 (Joe Sheldon County Park, 0.2 miles N, 1.4 miles W Humboldt P.O.; N42°43'42.1", W94°15'15.6"); and 1 lactating female, 1 postlactating female, 3 juvenile females, and 4 adult males released 21 July 2015 (Lotts Creek Park, 0.1 mile N, 0.7 miles W Livermore P.O.; N42°52'14.2", W94°11'42.3").

Jackson County (Reproductive Record): 1 lactating female, 1 postlactating female, 1 juvenile male, and 1 adult male released 10 July 2015 (Prairie Creek Recreation Area, 0.7 miles S, 1.4 miles E Maquoketa P.O.; N42°03'40.9", W90°38'17.0").

Jasper County (Geographic, Hibernation, and Reproductive Records): 9 individuals observed but not captured 6 October 2002, 105 individuals observed but not captured 4 March 2015, 128 individuals observed but not captured 23 February 2016 (storm sewer in Newton, 0.6 miles N Newton P.O.; T80N, R19W, Sec. 27 SW ¼); 1 juvenile (?) female and 1 juvenile (?) male released 17 August 2005, 1 postlactating female and 1 juvenile male released 30 August 2005, 4 postlactating females, 5 nonreproductive adult females, and 8 adult males released 12 September 2013, 2 adult males released 16 June 2016 (Beyer's Bridge WMA, 0.7 miles N, 6.6 miles E Monroe P.O.; T78N, R18W, Sec. 30 NW ¼ of NE ¼); 1 postlactating female, 1 juvenile female, and 2 adult males released 29 July 2007 (private property, 0.6 miles N, 6.7 miles E Monroe P.O.; N41°31'42.6", W92°58'14.5"); 2 adult males released 5 June 2012; 2 adult males released 20 June 2016 (Neil Smith NWR, West 109th Street South, 4.9 miles S, 0.8 miles W

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Prairie City P.O.; N41°31'40.1", W93°15'11.7"); 1 adult male released 10 July 2013 (private property along Wolf Creek, 3.3 miles N, 1.8 miles W Mingo P.O.; N41°49'05.5", W93°18'57.2"); 2 lactating females, 1 postlactating female, 1 juvenile female, 1 juvenile male, and 1 adult male released 26 July 2013 (Neal Smith NWR, Savanna Trail, 2.6 miles S, 1.7 miles W Prairie City P.O.; N41°33.365', W93°15.963'); and 3 postlactating females, 3 juvenile females, 1 nonreproductive adult female, 3 juvenile males, and 4 adult males released 17 August 2013, 1 adult female released 22 August 2014 (Ashton-Wildwood County Park, 2.8 miles N, 0.9 mile W Mingo P.O.; N41°48'40.0", W93°17'42.5").

Johnson County (Reproductive Records): 1 lactating female, 2 juvenile females, 1 adult female, and 1 juvenile male released 28 July 2011 (private property, 1.7 miles S, 4.6 miles E Solon P.O.; N41°46'27.0", W91°23'51.0"); 9 juvenile females, 6 juvenile males and 3 adult males released 29 July 2011 (private property, 3.7 miles S, 2.1 miles E Solon P.O.; N41°44'43.5", W91°26'49.0"); 2 postlactating females, 4 juvenile females, 10 juvenile males, and 2 adult males released 30 July 2011 (private property, 0.3 miles S, 3.6 miles E Solon P.O.; N41°47'34.7", W91°25'12.7"); 3 lactating females, 7 postlactating females, and 5 juvenile males released 31 July 2011 (private property, 0.3 miles S, 4.2 miles E Solon P.O.; N41°47'35.6", W91°24'21.6").

Keokuk County (Reproductive Record): 2 postlactating females, 4 nonreproductive adult females, and 1 adult males released 26 August 2005 (private property, 0.25 miles S, 0.7 miles E Hedrick P.O.; T74N, R12W, Sec. 31 NW ¼ of SW ¼).

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Kossuth County (Geographic and Reproductive Records): 1 adult male released 21 July 2015 (Smith Wildlife Area, 2.7 miles S, 0.5 miles E Algona P.O.; N43°01'35.3", W94°13'08.8"); 1 lactating female and 2 juvenile males released 31 July 2015 (Union Slough NWR, 0.8 miles N, 2.9 miles E Burt P.O.; N43°12'31.2", W94°09'43.1"); and 2 adult males released 27 June 2016 (Geigel Woods County Park, 2.1 miles S, 2.0 miles E Algona P.O.; N43°02'22.1", W94°11'22.3").

Louisa County (Geographic and Reproductive Records): 1 juvenile female and 1 juvenile male released 9 July 2011 (private property along Iowa River, 0.2 miles N, 1.1 miles W Oakville P.O.; N41°06'01.5", W91°03'49.1"); 5 adult males released 11 June 2012 (private property along Iowa River, 2.2 miles N, 0.1 miles W Wapello P.O.; N41°12'47.0", W91°11'25.4"); 2 adult males released 12 June 2012 (private property, 0.4 miles S, 0.7 miles E Wapello P.O.; N41°10'32.1", W91°10'18.2"); 1 lactating female released 14 June 2012 (private property, 7.2 miles S, 0.2 miles E Wapello P.O.; N41°04'29.4", W91°10'54.0"); 5 adult males released 22 June 2012 (Indian Slough Wildlife Area, 2.0 miles N, 0.6 miles W Wapello P.O.; N41°12'33.6", W91°11'59.5"); and 2 lactating females, 1 nonreproductive adult female, 4 juvenile males, and 4 adult males released 25 June 2012 (private property, 1.4 miles N, 0.7 miles E Wapello P.O.; N41°12'04.9", W91°10'25.1").

Lucas County (Reproductive Records): 9 lactating females, 1 postlactating female, and 2 adult males released 27 June 2005 (private property, 6.9 miles N, 2.7 miles W Lucas; T73N, R23W, Sec. 17 NE ¼ of NE ¼); 4 lactating females and 1 adult male released 30 June 2005 (private property, 5.4 miles N, 5.9 miles E Chariton P.O.; T73N, R20W, Sec. 30 SE ¼); 1 juvenile male released 20 July 2005 (private property, 4.5 miles N, 6.8 miles E Chariton P.O.; T73N, R20W,

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Sec. 32 SE ¼); 14 postlactating females, 20 juvenile females, 2 nonreproductive adult females, 27 juvenile males, and 5 adult males released 1 August 2005 (private property, 4.4 miles S, 2.1 miles E Russell P.O.; T71N, R20W, Sec. 28 SE ¼); and 1 juvenile male and 4 adult males released 2 August 2008 (Lake Morris 0.3 miles S, 3.0 miles E Chariton P.O.; N41°00'41.6", W93°15'07.4).

Madison County (Reproductive Records; additional 12 reproductive individuals captured not described below): 7 lactating females and 8 adult males released 29 June 2005 (private property, 2.8 miles N, 3 miles E Winterset P.O.; T76N, R27W, Sec. 16 SE ¼ of SE ¼); 9 lactating females, 1 adult female, 6 juvenile females, 16 juvenile males, and 5 adult males released 12 July 2005 (Hollowell Covered Bridge, 0.9 miles S, 2.8 miles E Winterset P.O.; T75N, R27W, Sec. 4 NE ¼); 5 lactating females, 4 postlactating females, 1 nonreproductive adult female, 2 juvenile females, 2 juvenile males, and 2 adult males released 18 July 2005 (private property, 0.3 miles N, 5.4 miles E Winterset P.O.; T76N, R27W, Sec. 36 NW ¼); 5 lactating females, 2 postlactating females, 1 nonreproductive adult female, 8 juvenile females, 7 juvenile males, and 3 adult males released 22 July 2005 (private property, 4.3 miles N, 2.7 miles W Winterset P.O.; T76N, R28W, SEC. 10 NW ¼); 6 lactating females, 6 postlactating females, 4 juvenile females, 3 juvenile males, and 3 adult males released 28 July 2005 (private property, 0.65 miles S, 0.7 miles W East Peru. P.O.; T74N, R27W, Sec. 10 SE ¼ of SE ¼); 5 lactating females, 18 postlactating females, 13 juvenile females, 2 nonreproductive adult females, 11 juvenile males, and 6 adult males released 29 July 2005, 12 lactating females, 3 postlactating females, 3 juvenile females, 1 female age unknown, 3 juvenile males, and 15 adult males released 27 June 2006, 12 postlactating females, 6 juvenile females, 2 nonreproductive adult females, 7 juvenile males,

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and 6 adult males released 23 July 2007 (private property, 2.3 miles N, 0.9 miles E Patterson P.O.; T76N, R26W, Sec. 16 NW $\frac{1}{4}$ of SW $\frac{1}{4}$).

Mahaska County (Reproductive Records; additional 38 reproductive individuals captured not described below): 3 lactating females and 7 adult males released 12 June 2006, 11 lactating females, 1 juvenile female, 1 nonreproductive adult female, and 1 adult male released 3 July 2007 (Eveland Access, Scheet's Addition, 3.0 miles S, 2.9 miles W Beacon P.O.; T74N, R16W, Sec. 6 SE $\frac{1}{4}$ of SE $\frac{1}{4}$); 7 lactating females and 5 adult males released 14 June 2006 (private property, 4.9 miles S, 4.8 miles W Beacon P.O.; T74N, R17W, sec. 13 SW $\frac{1}{4}$ of SW $\frac{1}{4}$); 88 lactating females, 1 nonreproductive adult female, 15 adult females, and 5 adult males released 15 June 2006 (private property, 5 miles S, 6.4 miles W Beacon P.O.; T74N, R17W, sec. 15 SE $\frac{1}{4}$ of SW $\frac{1}{4}$); 3 lactating females, 3 postlactating females, 1 nonreproductive adult female, 1 juvenile male, and 18 adult males released 13 July 2006 (private property, 1.2 miles S, 2.5 miles W Beacon P.O.; T75N, R16W, sec. 32 NW $\frac{1}{4}$); 13 postlactating females, 4 juvenile females, 7 juvenile males, and 2 adult males released 25 July 2006 (private property, 4.5 miles S, 0.8 miles W Rose Hill P.O.; T75N, R14W, Sec. 33 SE $\frac{1}{4}$ of NW $\frac{1}{4}$).

Marion County (Reproductive and Seasonal Records; additional 27 reproductive individuals captured not described below): 1 adult male released 5 February 2005 (Big Rock City Park, 1.2 miles N, 0.6 miles W Pella P.O.; N41°25'24.8", W92°55'49.7"); 10 lactating females, 1 postlactating female, 1 nonreproductive adult female, 1 juvenile female, 1 juvenile male, and 1 adult male released 29 June 2005 (bridge for Vermont Drive over creek, 0.2 miles E Maryville town center; T74N, R18W, Sec. 29 NE $\frac{1}{4}$ of SE $\frac{1}{4}$); 7 lactating females, 7 juveniles sex unknown, and 5 adult males observed or released 2 July 2005 (bridge for Wyoming Street over

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English Creek, 4.5 miles S, 0.9 miles E Dallas P.O.; T74N, R21W, Sec. 36 SE $\frac{1}{4}$ of SW $\frac{1}{4}$); 1 lactating female and 3 adult males released 6 July 2005, 6 lactating females, 4 postlactating females, 1 juvenile male, and 5 adult males released 29 June 2007, 5 postlactating females and 6 adult males released 10 September 2009, 15 postlactating females, 2 nonreproductive adult females, 1 juvenile female, 2 juvenile males, and 3 adult males released 20 August 2013 (private property, 0.3 miles S, 3.8 miles W Dallas P.O.; T74N, R21W, Sec. 7 SW $\frac{1}{4}$ of SE $\frac{1}{4}$); 1 lactating female, 33 postlactating females, 2 nonreproductive adult females, 7 juvenile females, 2 juvenile males, and 9 adult males released 2 August 2005, 12 lactating females, 2 juvenile females, 9 nonreproductive adult females, and 13 adult males released 28 June 2007, 7 postlactating females, 6 adult females, and 5 adult males released 13 September 2009 (private property, 5.9 miles N, 1.7 miles W Pella P.O.; T77N, R18W, Sec. 8 NE $\frac{1}{4}$ of NE $\frac{1}{4}$); 4 lactating females and 2 adult males released 29 May 2012, 1 postlactating female, 1 juvenile female, and 2 adult males released 13 July 2015 (Central College Field Station 2.4 miles S, 5.1 miles W Pella P.O.; N41°22'13.4", W93°01'01.1"); 1 juvenile male and 1 adult male released 5 September 2013, 1 postlactating female and 2 adult males released 30 August 2015, 1 pregnant female and 2 lactating females released 10 June 2016 (private property along Sand Creek, 5.2 miles S, 1.5 miles E Pella P.O.; N41°19'42.1", W92°53'18.5").

Mitchell County (Geographic and Reproductive Records): 2 nonreproductive adult females released 26 June 2017 (Hamlin Garland Wildlife Area, 1.7 miles N, 1.5 miles W St. Ansgar P.O.; N43°24'07.1", W92°56'20.2"); 1 adult male released 27 June 2017 (Otranto Park, 5.4 miles N, 3.5 miles E St. Ansgar P.O.; N43°27'27.7", W92°58'50.2"); 1 adult male released 27 June 2017 (Pinicon Alders Park, 1.1 miles N, 8.5 miles E Staceyville P.O.; N43°27'05.3", W92°36'39.7");

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2 adult males and 1 nonreproductive adult female released 27 June 2017 (private property, 0.5 miles S and 2.1 miles W Osage P.O.; N43°16'36.3", W92°51'01.8"); and 2 postlactating females and 8 adult males released 17 July 2017 (private property along Deer Creek, 3.1 miles N, 5.7 miles W St. Ansgar P.O.; N43°25'28.0", W93°01'17.9").

Monroe County (Geographic and Reproductive Records): 3 nonreproductive adult females and 1 adult male released 29 May 2006, 1 juvenile male released 15 July 2009, 2 juvenile females and 1 juvenile male released 16 July 2009, 3 lactating females, 7 postlactating females, 2 juvenile females, and 6 adult males released 18 July 2009, 1 juvenile male released 19 July 2009, 1 juvenile female released 22 July 2009, 1 juvenile male released 5 August 2009, 1 adult male released 12 August 2009, 2 postlactating females and 5 adult males released 13 August 2009, 1 postlactating female and 1 juvenile female released 9 August 2013 (private property, central location—2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1"); and 1 adult male released 7 September 2009 (private property, 4.0 miles S, 4.5 miles W Eddyville P.O.; N41°06'19.5", W92°43'41.4").

Muscatine County (Reproductive Records): 1 postlactating female released 16 July 2018 (Saulsbury Bridge Recreation Area, 1.4 miles N, 7.3 miles E Nichols P.O.; 41.49789, -91.1675); and 1 juvenile male and 5 adult males released 17 July 2018 (Wildcat Den State Park, 1.5 miles N, 7.6 miles E Muscatine P.O.; 41.46942, -90.88255).

Palo Alto County (Geographic and Reproductive Records): 1 lactating female, 1 postlactating female, 1 juvenile female, and 2 adult males released 22 July 2015 (Brushy Bayou WMA, 4.9 miles S, 1.3 miles E Emmetsburg P.O.; N43°02'17.9", W94°39'12.3"); 2 lactating females, 1

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nonreproductive adult female, and 1 adult male released 29 June 2016, 1 lactating female and 1 adult male released 30 June 2016 (Basswood Recreation Area, 1.5 miles N, 1 mile W Emmetsburg P.O.; N43°07'57.8", W94°42'15.9").

Polk County (Reproductive Records): 1 juvenile male released 30 July 2010, 1 nonreproductive adult female, 2 juvenile females, and 3 adult males released 8 August 2010, 2 juvenile females released 9 August 2010, 2 juvenile females, 1 juvenile male, and 1 adult male released 10 August 2010 (property of City of Des Moines, central location—1.3 miles S, 2.1 miles E Des Moines P.O.; N41°33'58.1", W93°34'44.0").

Pottawattamie County (Geographic and Reproductive Records): 1 juvenile female, 2 juvenile males, and 4 adult males released 8 July 2010; 2 lactating females, 7 postlactating females, 8 juvenile females, 13 juvenile males, 2 juveniles sex unknown, and 8 adult males released 13 July 2010 (private property along West Nishnabotna River 1.4 miles N, 1.3 miles W Griswold P.O.; N41°15'16.3", W95°09'58.6"); and 1 juvenile female, 1 juvenile male, and 5 adult males released 14 July 2010 (Hitchcock County Park, 4.7 miles N, 0.5 miles W Crescent P.O.; N41°25'08.9", W95°52'05.1").

Poweshiek County (Geographic and Reproductive Records): 1 adult female and 1 adult male released 15 June 2008, 1 lactating female and 1 adult male released 22 June 2008, 1 lactating female released 8 July 2008 (private property, 5.4 miles S, 1.3 miles W Grinnell P.O.; N41°39'57.3", W92°44'53.7"); and 1 lactating female and 1 nonreproductive adult female released 18 June 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

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Sioux County (Geographic and Reproductive Records): 2 juvenile females, 1 juvenile male, and 1 adult male released 23 July 2018 (Oak Grove Park, 4.4 miles N, 1.1 miles E Hawarden P.O.; 43.06266, -96.46309); 1 adult male released 24 July 2018 (Oak Grove P); and 2 lactating females, 3 juvenile males, and 1 adult male released 25 July 2018 (Sioux Rock Access).

Story County (Reproductive Records): 2 lactating females and 2 adult males released 24 July 2013 (Robison Wildlife Acres, 2.8 miles N, 2.1 miles W Maxwell P.O.; N41°55'52.6", W93°26'22.7"); and 2 lactating females and 2 adult males released 23 June 2015 (private property 2.9 miles N, 1.8 miles W Maxwell P.O.; N41°55'52.0", W93°26'22.2").

Tama County (Geographic and Reproductive Records): 1 juvenile male released 16 July 2012 (private property, 2.9 miles N, 2.9 miles E Chelsea P.O.; N41°57'43.2", W92°19'51.1"); 1 postlactating female and 2 juvenile females released 16 July 2012, 1 juvenile female released 19 July 2012 (private property, 3.2 miles N, 0.7 miles W Chelsea P.O.; N41°58'04.0", W92°23'53.7"); 1 juvenile female released 17 July 2012, 2 postlactating females released 20 July 2012 (private property along Salt Creek, 3.1 miles S, 0.4 miles E Elberon P.O.; N41°57'48.5", W92°18'49.5"); 2 juvenile females and 1 adult male released 17 July 2012, 2 postlactating females, 1 nonreproductive adult female, 2 juvenile males, and 1 adult male released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'58.6", W92°18'56.5"); and 1 adult male released 18 July 2012 (private property, 3.0 miles S, 2.5 miles W Elberon P.O.; N41°57'44.3", W92°21'42.0").

Taylor County (Geographic and Reproductive Records): 3 postlactating females, 3 nonreproductive adult females, 4 juvenile females, 1 juvenile male, and 3 adult males released

Eptesicus fuscus (continued)

2 August 2010 (Lake of Three Fires State Park, 2.8 miles N, 1.6 miles E Bedford P.O.; N40°42'25.7", W94°41'15.3"); and 1 adult male released 3 August 2010 (Sands Timber Recreation Area, 0.8 miles N, 1.4 miles West Blockton P.O.; N40°37'35.3", W94°30'11.6").

Van Buren County (Reproductive and Seasonal Records; additional 28 reproductive individuals captured not described below): 6 lactating females, 3 juvenile females, 6 juvenile males, 1 juvenile age unknown, and 7 adult males released 20 June 2006 (private property, 0.7 miles N, 4.3 miles W Keosauqua P.O.; T69N, R10W, sec. 29 SW ¼ of SW ¼); 5 lactating females, 2 juvenile females, 3 juvenile males, and 3 adult males released 30 June 2006 (private property, 0.9 miles S, 0.75 miles E Keosauqua P.O.; T68N, R9W, sec. 6 SW ¼ of NW ¼); 14 lactating females, 4 postlactating females, 1 juvenile female, 1 juvenile male, and 1 adult male released 10 July 2006 (private property, 1 mile N, 5.6 miles E Keosauqua P.O.; T69N, R9W, sec 26 NE ¼ of SE ¼); 3 lactating females, 6 postlactating females, 3 nonreproductive adult females, 12 juvenile females, 21 juvenile males, and 4 adult males released 11 July 2006 (private property, 0.5 miles S, 3.7 miles W Keosauqua. P.O.; T68N, R10W, sec. 5 NW ¼ of NE ¼); 16 lactating females, 46 postlactating females, 2 nonreproductive adult females, 14 juvenile females, 16 juvenile males, and 2 adult males released 18 July 2006 (private property, roughly 2.6 miles N, 4.6 miles E Keosauqua P.O.; T69N, R9W, Sec. 22 NE ¼); and 6 lactating females, 7 postlactating females, 5 nonreproductive adult females, 14 juvenile females, 16 juvenile males, and 7 adult males released 19 July 2006 (private property, 2.6 miles N, 3.2 miles W Keosauqua P.O.; T69N, R10W, Sec. 16, SW ¼).

Wapello County (Reproductive Records): 1 lactating female released 2 July 2006, 2 juvenile females and 1 adult male released 22 July 2006 (Garrison Rock Park, roughly 2.9 miles S,

Eptesicus fuscus (continued)

4.1 miles E Ottumwa P.O.; N40°59'08.4", W92°21'09.5"); 1 juvenile female released 26 June 2012 (private property, 5.2 miles S, 0.5 miles E Ottumwa P.O.; N40°56'54.4", W92°24'29.5"); 1 postlactating female and 6 adult males released 29 June 2012 (private property, 3.8 miles S, 0.7 miles E Ottumwa P.O.; N40°58'05.1", W92°24'09.7"); 1 lactating female, 2 postlactating females, 1 juvenile female, 1 juvenile male, and 1 adult male released 5 July 2012 (private property, 4.7 miles S, 0.7 miles E Ottumwa P.O.; N40°57'21.1", W92°24'13.0"); 1 juvenile female and 1 adult male released 6 July 2012 (private property, 7.2 miles S, 0.5 miles E Ottumwa P.O.; N40°55'09.6", W92°24'26.5"); and 1 lactating female and 4 adult males released 26 June 2014 (private property, site 0.2 miles S, 0.2 miles E Chillicothe P.O.; N41°05'01.8", W92°31'30.3").

Warren County (Reproductive Records): 6 lactating females, 2 nonreproductive adult females, and 2 adult males released 25 June 2008 (private property along North River, 3.15 miles N, 2.1 miles W Martensdale P.O.; T76N, R25W, Sec. 6 SW ¼ of NE ¼); 1 lactating female released 13 July 2008 (private property, 1.1 miles S, 2.1 miles W Martensdale P.O.; N41°21'32.3", W93°46'36.9"); and 1 juvenile female released 13 July 2008 (private property along North River, 3.2 miles N, 2.2 miles W of Martensdale P.O.; N41°25'12.8" W93°46'53.8").

Worth County (Reproductive Record): 2 lactating females, 1 postlactating female, 1 juvenile female, 2 nonreproductive adult females, and 2 adult males released 19 July 2017 (Wally's Wood Wildlife Area, 0.6 miles S, 1.7 miles E Fertile P.O.; N43°15'19.6", W93°23'34.8").

Eptesicus fuscus (continued)

Wright County (Reproductive Record): 4 postlactating females, 2 juvenile females, 3 juvenile males, and 4 adult males released 25 July 2016 (Pike's Timber, 3.6 miles N, 4.2 miles E Clarion P.O.; N42°47'00.2", W93°38'53.5").

Museum Records (Geographic Records): **Black Hawk County**, Waterloo, 1 collected by John Bowles, 30 August 1970 (TTU 23013); Cedar Falls, 1 collected by John Bowles, 4 March 1972 (TTU 23012); Cedar Falls, 2 collected by John Bowles, 19 August 1970 and 28 August 1970 (SUI 34085–34085); **Bremer County**, Denver, 1 collected by Dave DeGeus, 19 October 1983 (SUI 34388); **Davis County**, 6 miles SE Pulaski, 1 collected by Larry Watkins, 10 June 1971 (MSU 17349); **Jasper County**, Prairie City, 1 collected by Gene Jennings, 25 December 1968 (KU 169363).

Lasionycteris noctivagans

Clarke County (Geographic and Reproductive Records): 1 lactating female released 24 June 2007; 2 juvenile males released 2 July 2007; and 1 pregnant female released 19 June 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0").

Dallas County (Geographic, Reproductive, and Seasonal Record): 2 lactating females released 16 June 2011 (private property 0.1 miles S, 2.5 miles E Booneville P.O.; N41°31'09.9" and W93°50'20.2").

Lasionycteris noctivagans (continued)

Guthrie County (Geographic, Reproductive, and Seasonal Records): 1 postlactating female and 1 juvenile male released 1 July 2010; and 1 juvenile male released 6 July 2010 (Lenon Mills Wildlife Management Area 1.7 miles S, 0.3 miles W Panora P.O.; N41°39'59.2", W94°22'19.7"); 1 juvenile male released 4 August 2010 (private property along Middle Raccoon River 0.6 miles S, 1.4 miles W Linden P.O.; N41°37'56.6", W94°17'57.6"); and 1 adult (?) male released 6 August 2010 (Bennie Hall Wildlife Area 0.4 miles S, 1.8 miles W Linden P.O.; T79N, R30W, Sec. 23 NE ¼ of SE ¼)

Monroe County (Geographic Record): 1 adult male released 13 August 2009 (private property 2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1").

Pottawattamie County (Geographic and Reproductive Record): 1 lactating female released 5 June 2009 (Hitchcock Nature Center 3.4 miles N, 0.6 miles W Crescent P.O.; T76N, R44W, Sec. 2 center).

Tama County (Geographic and Reproductive Record): 1 juvenile female released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'59.1", W92°19'02.3").

Taylor County (Geographic and Reproductive Record): 1 juvenile female released 3 August 2010 (Sands Timber Recreation Area 0.8 miles N, 1.4 miles W Blockton P.O.; N40°37'35.3", W94°30'11.6").

Wapello County (Geographic Record): 1 adult male released 9 June 2014 (private property 2.5 miles S, 2.2 miles E Chillicothe P.O.; N41°02'57.6", W92°29'03.7")

Lasionycteris noctivagans (continued)

Warren County (Reproductive Records): 1 lactating female released 25 June 2008 (private property along North River 3.1 miles N and 1.9 miles W Martensdale P.O.; N41°25'09.2" W93°46'44.7"); 1 juvenile female released 13 July 2008 (private property along North River 3.2 miles N, 2.1 miles W Martensdale P.O.; N41°25'12.8", W93°46'53.8").

Museum Records (Geographic Record): **Webster County**, Brushy Creek Recreation Area, 2 miles N, 3 miles E Lehigh, 1 collected by John Bowles, 13 July 1979 (SUI 34099).

Lasiurus borealis

Adams County (Geographic and Reproductive Records): 1 juvenile female released 22 July 2010 (private property along East Nodaway River 1.7 miles S, 5.1 miles W Corning P.O.; N40°57'58.0", W94°50'08.0"); 1 juvenile female released 26 July 2010 (private property 5.9 miles S, 7.0 miles W Corning P.O.; N40°54'21.7", W94°52'04.8").

Chickasaw County (Geographic Record): 1 adult female released 12 June 2017 (Twin Ponds County Park, 3.6 miles S, 3.8 miles W New Hampton P.O.; N43°00'45.7", W92°23'15.9").

Clarke County (Geographic and Reproductive Records): total of 57 individuals released, including 7 lactating females, 4 postlactating females, 2 adult males, and 36 juveniles (13 males, 22 females, 1 not recorded) captured during 20 nights of netting in late June and early July 2007, early July 2009, late July 2009, early August 2009, late June 2013, and mid July 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0")

Lasiurus borealis (continued)

Clinton County (Geographic and Reproductive Record): 1 juvenile female and 1 juvenile male released 19 July 2018 (Sherman Park, 3.2 miles S, 1.5 miles W Calamus P.O.; 41.77872, –90.78658).

Dallas County (Geographic and Reproductive Records; additional 6 nonreproductive individuals captured not described below): 1 juvenile female released 30 June 2010 (private property 1.2 miles S, 1.2 miles E De Soto P.O.; N41°30'55.7", W93°59'19.1"); 1 pregnant female released 17 June 2011 (private property 0.1 miles S, 2.5 miles E Booneville P.O.; N41°31'09.9" and W93°50'20.2"); 1 lactating female and 1 adult male released 23 June 2011 (private property 0.1 miles S, 2.5 miles E Booneville P.O.; N41°31'09.9" and W93°50'20.2"); 1 adult male released 13 August 2012 (private property 1.9 miles N, 1.6 miles E Booneville P.O.; N41°33'06.8", W93°51'14.9"); and 1 pregnant female released 27 May 2013 (private property along Sugar Creek 2.4 miles N, 1.7 miles E Booneville P.O.; N41°33'32.9", W93°51'06.5")

Davis County (Geographic and Reproductive Records; additional 1 individual captured not described below): 2 postlactating females, 1 juvenile female, and 2 adult males released 26 June 2012; and 3 postlactating females, 2 juvenile females, and 1 juvenile male released 11 July 2012 (private property 10.0 miles N, 0.3 miles W Bloomfield P.O.; N40°53'56.0", W92°24'28.2"); 1 juvenile male and 2 juvenile females released 29 June 2012 (private property 7.2 miles N, 0.9 miles E Bloomfield P.O.; N40°51'25.4", W92°23'48.8"); 1 lactating female released 2 July 2012 (private property along Soap Creek 9.1 miles N, 0.3 miles W Bloomfield P.O.; N40°53'12.7", W92°24'37.3"); 1 postlactating female, 1 juvenile female, and 1 juvenile male released 11 July 2012 (private property along Soap Creek, 8.9 miles N, 0.2 miles W Bloomfield P.O.; N40°53'00.1", W92°24'35.3").

Lasiurus borealis (continued)

Des Moines County (Geographic and Reproductive Records; additional 1 nonreproductive individual and 1 reproductive individual captured not described below): total of 17 individuals released including 5 lactating females, 3 postlactating females, 4 juvenile females, 2 juvenile males, and 3 adult females captured during 6 nights of netting in mid-July 2011, and mid-July 2014 (Big Hollow Recreation Area, central location—4.0 miles S, 3.2 miles W Mediapolis P.O.; N40°57'04.8", W91°13'38.0"); 2 lactating females and 1 adult male released 13 June 2012 (private property along Knotty Creek, 2.4 miles N, 0.2 miles E West Burlington P.O.; N40°51'21.2", W91°09'13.9"); 1 postlactating female released 14 June 2012; and 1 juvenile female and 1 adult male released 22 June 2012 (private property, 2.8 miles N West Burlington, P.O.; N40°52'05.1", W91°09'36.1"); 2 juvenile males and 3 juvenile females released 19 June 2012; and 3 postlactating females, 4 juvenile females, and 3 juvenile males released 21 June 2012 (private property, 2.7 miles N, 0.2 miles W West Burlington P.O.; N40°51'54.1", W91°09'50.5"); and 1 lactating female, 1 postlactating female, 1 juvenile male, and 1 juvenile female released 21 June 2012 (private property, 1.7 miles N West Burlington P.O.; N40°50'53.2", W91°09'15.8").

Floyd County (Geographic and Reproductive Records): 1 lactating female released 14 June 2017 (Idlewild County Park, 2.7 miles N, 1.3 miles W Floyd P.O., N43°09'51.3", W92°45'30.4"); and 1 adult female released 14 June 2017 (Colwell Park, 1.8 miles N, 4.6 miles E Floyd P.O.; N43°09'15.3", W92°38'36.6").

Franklin County (Geographic and Reproductive Records): 1 juvenile female and 1 adult male released 26 July 2016 (West Fork Wildlife Area, 4.1 miles N, 8.7 miles E Hampton P.O.; N42°48'06.9", W93°02'07.6"); and 1 postlactating female and 1 juvenile female released 27 July 2016 (Ingebretson Wildlife Refuge, 0.4 miles N, 2.5 miles W Sheffield P.O.; N42°54'03.3", W93°15'45.8").

Lasiurus borealis (continued)

Fremont County (Geographic and Reproductive Records): 2 postlactating females and 7 juvenile females released 15 July 2010 (Riverton Wildlife Management Area, 0.6 miles W Riverton P.O.; N40°41'14.9", W95°34'43.8"); 2 juvenile females released 16 July 2010 (Riverton Wildlife Management Area, 0.75 miles N, 0.1 mile E Riverton P.O.; N40°41'48.8", W95°34'01.1"); 3 juvenile females and 2 juvenile males released 16 July 2010 (Manti Memorial Park, 0.6 miles N, 4.1 miles E Fremont P.O.; N40°43'36.6", W95°24'06.6"); and 3 juvenile females released 25 July 2010 (Waubonsie State Park, 5.3 miles S, 2.3 miles W Sidney P.O.; N40°40'27.0", W95°41'22.1").

Guthrie County (Geographic, Reproductive, and Seasonal Records; additional 1 reproductive and 2 nonreproductive individuals captured not described below): 2 postlactating females released 1 July 2010; and 1 juvenile female released 6 July 2010 (Lenon Mills Wildlife Management Area, 1.7 miles S, 0.3 miles W Panora P.O.; N41°39'59.2", W94°22'19.7"); 2 juvenile females and 1 juvenile male released 7 July 2010 (Springbrook Wildlife Management Area, 5.5 miles N, 1.7 miles E Guthrie Center P.O.; N41°45'37.5", W94°28'07.2"); 8 juvenile females released 4 August 2010 (private property along Middle Raccoon River, 0.6 miles S, 1.4 miles W Linden P.O.; N41°37'56.6", W94°17'57.6"); 4 juvenile females released 5 August 2010 (Middle Raccoon River Wildlife Management Area 2.7 miles S, 2.0 miles E Panora P.O.; N41°39'03.5", W94°19'16.0"); 1 adult male released 6 August 2010 (Bennie Hall Wildlife Area, 0.4 miles S, 1.8 miles W Linden P.O.; T79N, R30W, Sec. 23 NE ¼ of SE ¼); 3 lactating females and 1 juvenile female released 8 June 2012, 1 lactating female, 1 postlactating female, and 3 juvenile males released 12 July 2013, and 1 lactating female released 20 June 2014 (Whiterock Conservancy 3.1 miles S, 1.4 miles E Coon Rapids P.O.; N41°50'55.5", W94°39'55.4").

Lasiurus borealis (continued)

Hancock County (Geographic and Reproductive Records): 1 postlactating female and 1 juvenile female released 30 July 2015 (Eagle Lake State Park, 1.6 miles N, 3.2 miles E Britt P.O.; N43°07'23.1", W93°44'25.7"); and 1 male released on 15 August 2016 (Eldred Sherman Recreation Area, 4.4 miles S, 1.7 miles E Klemme P.O.: N42°56'35.2", W93°34'01.3").

Humboldt County (Geographic and Reproductive Records): 1 nonreproductive adult female released 20 July 2015, and 2 lactating females, 3 postlactating females, and 1 nonreproductive adult female released 28 June 2016 (Joe Sheldon County Park, 0.2 miles N, 1.4 miles W Humboldt P.O.; N42°43'42.1", W94°15'15.6"); and 1 juvenile female released 21 July 2015 (Lotts Creek Park, 0.1 mile N, 0.7 miles W Livermore P.O.; N42°52'14.2", W94°11'42.3").

Johnson County (Geographic and Reproductive Records): 1 juvenile female released 28 July 2011 (private property, 2.1 miles S, 3.8 miles E Solon P.O.; N41°46'25.6", W91°24'53.0); 1 postlactating female, 9 juvenile females, and 2 juvenile males released at several sites on 29 July 2011 (private property, central location—1.6 miles S, 1.8 miles E Solon P.O.; N41°46'24.5", W91°27'08.9); and 3 juvenile males released at several sites on 30 July 2011 (private property, central location—2.1 miles S, 3.8 miles E Solon P.O.; N41°46'25.6", W91°24'53.0).

Kossuth County (Geographic and Reproductive Records): 1 juvenile male released 31 July 2015 (Union Slough National Wildlife Refuge, 0.8 miles N, 2.9 miles E Burt P.O.; N43°12'31.2", W94°09'43.1").

Lasiurus borealis (continued)

Lee County (Geographic Records): 1 male and 1 nonreproductive female released 6 August 2007 (private property, 2.0 miles N, 2.3 miles W Fort Madison P.O.; N40°39'36.5", W91°21'34.7"); 1 adult male released 7 August 2007 (private property, 2.9 miles N, 2.3 miles W Fort Madison P.O.; N40°40'18.6", W91°16'19.4"); 1 nonreproductive adult female released 13 August 2007 (private property; 0.7 miles N, 3.4 miles W of Fort Madison P.O.; N40°38'27.0" W91°22'48.1"); 2 adult males released 14 August 2007 (private property, 2.7 miles N, 1.8 miles W Fort Madison P.O.; N40°40'04.9", W91°21'03.2"); and 1 nonreproductive adult female released 15 August 2007 (private property, 2.8 miles N, 2.2 miles W Fort Madison P.O.; N40°40'17.5", W91°16'22.3").

Louisa County (Geographic, Reproductive, and Seasonal Records): 1 postlactating female released 9 July 2011 (private property along Iowa River, 0.2 miles N, 1.1 miles W Oakville P.O.; N41°06'01.5", W91°03'49.1"); 1 adult male released 11 June 2012, 1 juvenile female and 2 juvenile males released 25 June 2012 (private property, 1.4 miles N, 0.7 miles E Wapello P.O.; N41°12'04.9", W91°10'25.1"); 3 lactating females and 1 postlactating female released 11 June 2012 (private property along Iowa River, 2.2 miles N, 0.1 miles W Wapello P.O.; N41°12'47.0", W91°11'25.4"); 2 lactating females and 1 juvenile female released 12 June 2012 (private property, 0.4 miles S, 0.7 miles E Wapello P.O.; N41°10'32.1", W91°10'18.2"); and 2 postlactating females released 14 June 2012 (private property, 7.2 miles S, 0.2 miles E Wapello P.O.; N41°04'29.4", W91°10'54.0").

Lucas County (Reproductive Records; additional 9 nonreproductive individuals captured not described below): 1 lactating female released 28 June 2005 (Stephens State Forest, Cedar Creek Unit, 4.2 miles N, 7.3 miles E Chariton P.O.; T73N, R20W, Sec. 33 SW ¼); 1 lactating female

Lasiurus borealis (continued)

and 1 male age unknown released 26 June 2009 (Stephens State Forest 1.0 miles S, 1.1 miles W Lucas P.O.; N41°00'55.5", W93°28'50.3"); and 2 adult males released 29 June 2009 (Stephens State Forest, Lucas Unit, 0.5 miles S, 0.6 miles W Lucas P.O.; N41°01'16.8", W93°28'25.0").

Madison County (Geographic and Reproductive Records): 1 postlactating female released 18 July 2005 (bridge for Quail Ridge Trail over Middle River, 0.3 miles N, 5.5 miles E Winterset P.O.; T76N, R27W, Sec. 36 NE ¼ of SW ¼); 1 adult male and 1 adult female released 27 August 2005; and 3 adult females and 2 adult males released 1 September 2011 (private property along North River 3.8 miles N, 3.0 miles W Winterset P.O.; T76N, R28W, Sec. 10 NW ¼ of SW ¼).

Marion County (Reproductive and Seasonal Records; additional 34 nonreproductive individuals captured not described below): 1 juvenile female and 1 juvenile male released 4 August 2008; 1 juvenile female and 1 adult female released 11 August 2008 (Cordova County Park, 1.4 miles N, 8.5 miles W Pella P.O.; N41°25'34.4", W93°04'59.5"); 1 postlactating female released 6 July 2009 (Lake Red Rock, Marina Area, 0.2 miles N, 5.4 miles W Pella P.O.; N41°24'27.1", W93°00'56.4"); 1 postlactating female released 9 July 2009 (Lake Red Rock, North Overlook Campground, 1.6 miles S, 2.7 miles W Pella P.O.; N41°22'43.7", W92°58'19.1"); 2 lactating females released 29 May 2012; 1 pregnant female released 17 June 2013, 1 postlactating female and 1 juvenile male released 13 July 2015, 2 lactating females released 9 June 2016, and 1 juvenile female released 1 August 2016 (Central College Field Station 2.4 miles S, 5.1 miles W Pella P.O.; N41°22'13.4", W93°01'01.1"); and 1 lactating female and 2 adult males released 22 June 2016 (Red Rock Wildlife Management Area—SE, 5.5 miles N, 3.5 miles E Pleasantville P.O.; N41°27'51.7", W93°12'07.8").

Lasiurus borealis (continued)

Monroe County (Geographic, Reproductive, and Seasonal Records): total of 63 individuals released including 5 lactating females (including 2 on 18 July 2009), 12 postlactating females, 29 juveniles, and 17 nonreproductive adults captured during 15 nights of netting in mid-July 2009, early and mid-August 2009, and early August 2013 (private property, central location—2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1").

Muscatine County (Geographic and Reproductive Records): 1 lactating female, 1 postlactating female, and 1 nonreproductive adult female released 17 July 2018 (Wildcat Den State Park, 1.5 miles N, 7.6 miles E Muscatine P.O.; 41.46942, -90.88255); and 1 postlactating female released 18 July 2018 (Richardson Wildlife Area, 8.3 miles S, 0.2 miles E Nichols P.O.; 41.35908, -91.30551).

Palo Alto County (Geographic and Reproductive Records): 1 juvenile male released 22 July 2015 (Brushy Bayou Wildlife Management Area, 4.9 miles S, 1.3 miles E Emmetsburg P.O.; N43°02'17.9", W94°39'12.3"); 1 female escaped net 30 June 2016 (Basswood Recreation Area, 1.5 miles N, 1 mile W Emmetsburg P.O.; N43°07'57.8", W94°42'15.9").

Polk County (Reproductive Records): total of 6 individuals including 3 juvenile males and 3 juvenile females released during 4 nights of netting in late July and mid-August 2010 (property of City of Des Moines, central location—1.3 miles S, 2.1 miles E Des Moines P.O.; N41°33'58.1", W93°34'44.0").

Pottawattamie County (Geographic and Reproductive Records): 1 lactating female and 1 postlactating female released 8 July 2010, 5 juvenile females released 13 July 2010 (private property, 1.5 miles N, 13.4 miles E Carson P.O.; N41°14'54.4", W95°09'56.0"); and 2

Lasiurus borealis (continued)

postlactating females and 2 juvenile females released 14 July 2010 (Hitchcock County Park, 4.7 miles N, 0.5 miles W Crescent P.O.; N41°25'08.9", W95°52'05.1").

Poweshiek County (Geographic and Reproductive Records): 1 adult female released 9 June 2008, 1 pregnant female and 1 adult male released 13 June 2008 (private property, 5.4 miles S, 1.3 miles W Grinnell P.O.; N41°39'57.3", W92°44'53.7"); and 1 adult male released 11 July 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

Story County (Reproductive Record): 1 lactating female released 23 June 2015 (private property, 2.9 miles N, 1.8 miles W Maxwell P.O.; N41°55'52.0", W93°26'22.2").

Tama County (Geographic and Reproductive Records): 1 juvenile female and 1 juvenile male released 16 July 2012 (private property, 2.9 miles N, 2.9 miles E Chelsea P.O.; N41°57'43.2", W92°19'51.1"); 2 nonreproductive adult females, 2 adult males, and 3 juvenile males released 17 July 2012, 1 nonreproductive adult female, 2 adult males, and 1 juvenile female released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'58.6", W92°18'56.5"); 1 adult female escaped net and 4 juvenile males released 18 July 2012, 1 postlactating female, 6 juvenile females, and 2 juvenile males released 19 July 2012 (private property, 3.0 miles S, 2.5 miles W Elberon P.O.; N41°57'44.3", W92°21'42.0"); 1 postlactating female, 1 juvenile female, and 1 juvenile male released 19 July 2012 (private property, 3.2 miles N, 0.7 miles W Chelsea P.O.; N41°58'04.0", W92°23'53.7"); and 1 adult male and 1 juvenile female released 20 July 2012 (private property along Salt Creek, 3.1 miles S, 0.4 miles E Elberon P.O.; N41°57'48.5", W92°18'49.5").

Lasiurus borealis (continued)

Taylor County (Geographic and Reproductive Records): 3 juvenile females and 1 juvenile male released 2 August 2010 (Lake of Three Fires State Park, 2.8 miles N, 1.6 miles E Bedford P.O.; N40°42'25.7", W94°41'15.3"); and 3 juvenile females and 1 juvenile male released 3 August 2010 (Sands Timber Recreation Area, 0.8 miles N, 1.4 miles W Blockton P.O.; N40°37'35.3", W94°30'11.6").

Van Buren County (Reproductive Records): 1 juvenile female released 26 July 2006 (private property, 1.6 miles N, 4.0 miles W Douds P.O.; T70N, R11W, Sec. 18 NW ¼ SE ¼); 2 lactating females released 1 July 2008 (private property along Lick Creek, 3.25 miles S, 1.8 miles E Birmingham P.O.; T70N, R9W, Sec. 29 SE ¼ of SE ¼); and 1 lactating female released 14 July 2008 (private property, 4.4 miles S, 3.8 miles W Birmingham P.O.; T70N, R10W, Sec. 33 SW ¼ SW ¼).

Wapello County (Geographic and Reproductive Records; additional 13 individuals captured not described below including 2 reproductive females and 11 juveniles): 5 postlactating females released 2 July 2006, 1 adult male released 11 August 2006 (Garrison Rock Park, roughly 2.9 miles S, 4.1 miles E Ottumwa P.O.; N40°59'08.4", W92°21'09.5"); 1 lactating female and 1 juvenile female released 26 June 2012 (private property, 5.2 miles S, 0.5 miles E Ottumwa P.O.; N40°56'54.4", W92°24'29.5"); 1 postlactating female and 1 juvenile female released 28 June 2012 (private property, 6.1 miles S, 0.5 miles E Ottumwa P.O.; N40°56'09.0", W92°24'24.3"); 1 adult male, 5 juvenile females, and 1 juvenile male released 6 July 2012 (private property, 7.2 miles S, 0.5 miles E Ottumwa P.O.; N40°55'09.6", W92°24'26.5"); 1 pregnant female and 1 adult male released 11 June 2014 (private property, 2.1 miles S, 1.9 miles E Chillicothe P.O.;

Lasiurus borealis (continued)

N41°03'20.7", W92°29'36.0"); and 2 lactating females released 13 June 2014 (Rock Bluff Natural Area, 2.6 miles S, 2.6 miles E Chillicothe P.O.; N41°02'55.1", W92°28'50.3").

Warren County (Geographic and Reproductive Records): 2 pregnant females released 16 June 2008 (private property, 2.7 miles S, 2.2 miles W Martensdale P.O.; N41°20'02.1", W93°46'50.7"); 1 lactating female released 18 June 2008 (private property, 1.6 miles N, 2.2 miles W Martensdale P.O.; N41°23'52.8", W93°46'51.8"); and 1 nonreproductive adult female and 1 adult male released 13 July 2008 (private property, 1.1 miles S, 2.1 miles W Martensdale P.O.; N41°21'32.3", W93°46'36.9").

Wright County (Geographic and Reproductive Record): 1 postlactating female, 1 juvenile female, and 6 juvenile males released 25 July 2016 (Pike's Timber, 3.6 miles N, 4.2 miles E Clarion P.O.; N42°47'00.2", W93°38'53.5")

Museum Records (Geographic Records): **Grundy County**, Conrad, 1 collected by John Bowles, 19 October 1971 (TTU 23020); **Lee County**, 0.5 miles N Croton, 1 collected by John Bowles, 2 June 1979 (SUI 34100); **Union County**, 5 miles E Afton, 3 collected by Larry Watkins, L. Hinesley, and Tim Bonecutter, 28 August 1966, 15 October 1966, and 11 June 1971 (KU 169412, 169413, 127890).

Lasiurus cinereus

Clarke County (Geographic, Reproductive, and Seasonal Records): total of 4 individuals released including 3 juveniles (including 1 on 30 June 2007) and 1 adult male captured during 4 nights of

Lasiurus cinereus (continued)

netting in late June and early July 2007, late July 2009, and mid-July 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0").

Dallas County (Geographic and Reproductive Record): 1 juvenile female released 9 July 2010 (private property, 1.2 miles S, 1.2 miles E De Soto P.O.; N41°30'55.7", W93°59'19.1").

Des Moines County (Geographic, Reproductive, and Seasonal Records): 1 lactating female released 13 June 2012 (private property along Knotty Creek, 2.1 miles N, 0.7 miles W West Burlington P.O.; N40°51'21.2", W91°09'13.9"); 1 lactating female released 14 June 2012 (private property, 2.7 miles N, 0.1 miles E West Burlington P.O.; N40°52'05.4", W91°09'35.4"); 1 postlactating female released 21 June 2012 (private property, 1.5 miles N, 0.2 miles E West Burlington P.O.; N40°50'53.3", W91°09'21.5").

Franklin County (Geographic and Reproductive Record): 1 juvenile female released 27 July 2016 (Ingebretson Wildlife Refuge, 0.4 miles N, 2.5 miles W Sheffield P.O.; N42°54'03.3", W93°15'45.8").

Guthrie County (Geographic and Reproductive Records): 1 juvenile male released 28 July 2010 (Middle Raccoon River Wildlife Management Area, 2.8 miles S, 2.0 miles E Panora P.O.; N41°38'59.4", W94°19'18.4"); 1 adult female released 5 August 2010 (Middle Raccoon River Wildlife Management Area, 2.7 miles S, 2.0 miles E Panora P.O.; N41°39'03.5", W94°19'16.0"); and 1 juvenile male released 12 July 2013 (Whiterock Conservancy, 3.1 miles S, 1.4 miles E Coon Rapids P.O.; T81N, R33W, Sec. 14 center).

Lasiurus cinereus (continued)

Johnson County (Reproductive Record): 1 juvenile male released 29 July 2011 (private property, 1.6 miles S, 1.8 miles E Solon P.O.; N41°44'43.5", W91°26'49.0").

Pottawattamie County (Reproductive Record): 1 juvenile male released 13 July 2010 (private property along West Nishnabotna River, 1.4 miles N, 1.3 miles W Griswold P.O.; N41°15'16.3", W95°09'58.6").

Poweshiek County (Geographic and Reproductive Record): 1 lactating female released 20 June 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

Story County (Reproductive Record): 1 lactating female and 1 adult nonreproductive female released 23 June 2015 (private property, 2.9 miles N, 1.8 miles W Maxwell P.O.; N41°55'52.0", W93°26'22.2")

Van Buren County (Reproductive Record): 1 lactating female released 18 July 2008 (private property along Rock Creek, 2.5 miles N, 3.1 miles E Keosauqua P.O.; N40°46'02.5", W91°54'15.0")

Warren County (Geographic Record): 1 adult male released 18 June 2008 (1.6 miles N, 2.2 miles W Martensdale P.O.; N41°23'50.5", W93°46'55.9").

Museum Record (Geographic Record): **Black Hawk County**, Cedar Falls, 1 collected by Dave DeGeus, 1 July 1982 (SUI 34390).

Myotis lucifugus

Allamakee County (Seasonal Record): 18 bats (details not recorded) released 14 May 2004 (Yellow River State Forest, Little Paint Creek on west edge of Little Creek Campground; N43.173°, W91.253°).

Bremer County (Geographic and Reproductive Record): 40 postlactating females released 11 August 2010 (Alcock Park, 0.2 miles W Frederica P.O.; N42°52'54.0", W92°18'39.1").

Chickasaw County (Reproductive Records): 3 pregnant females released 12 June 2017 (Twin Ponds County Park, 3.6 miles S, 3.8 miles W New Hampton P.O.; N43°00'45.7", W92°23'15.9"); 3 pregnant females released 13 June 2017 (Upper Wapsi Access, 6.7 miles S, 2.0 miles W New Hampton P.O.; N42°57'52.0", W92°21'25.8"); and 1 lactating female released 18 July 2017 (Wapsi Access Area, 2.5 miles N, 7.8 miles W New Hampton P.O.; N43°06'02.17", W92°28'17.67").

Dallas County (Geographic Records): 1 adult male released 30 June 2010 (private property, 1.2 miles S, 1.2 miles E De Soto P.O.; N41°30'55.7", W93°59'19.1"); and 1 adult female released 27 May 2013 (private property along Sugar Creek, 2.4 miles N, 1.7 miles E Booneville P.O.; N41°33'32.9", W93°51'06.5").

Davis County (Geographic and Reproductive Record) 2 lactating females and 6 adult males released 29 June 2012 (private property, 7.2 miles N, 0.9 miles E Bloomfield P.O.; N40°51'25.4", W92°23'48.8").

Decatur County (Reproductive Record): 1 lactating female released 6 July 2006 (bridge for County Hwy. R58 over Brush Creek, 0.8 miles S, 4.8 miles E Leon. P.O.; T69N, R24W, sec 31 SE ¼).

Myotis lucifugus (continued)

Des Moines County (Geographic and Reproductive Records): 2 lactating females, 4 juvenile males, and 2 adult males released on various dates July 2011 and July 2014 (Big Hollow Recreation Area, central location—4.0 miles S, 3.2 miles W Mediapolis P.O.; N40°57'04.8", W91°13'38.0"); 2 adult males released 13 June 2012 (private property along Knotty Creek, 2.4 miles N, 0.2 miles E West Burlington P.O.; N40°51'21.2", W91°09'13.9"); 1 adult male released 21 June 2012 (private property, 1.7 miles N West Burlington P.O.; N40°50'53.2", W91°09'15.8"); and 1 adult male released 22 June 2012 (private property, 2.8 miles N West Burlington, P.O.; N40°52'05.1", W91°09'36.1").

Emmet County (Reproductive Record): 1 lactating female and 2 adult males released 1 July 2015 (Fort Defiance State Park, 1.0 miles S, 1.4 miles W Estherville P.O.; N43°23'36.7", W94°51'32.5").

Floyd County (Reproductive Records): 2 pregnant females, 1 lactating female, and 2 nonreproductive adult females released 4 June 2017 (Idlewild County Park, 2.7 miles N, 1.3 miles W Floyd P.O., N43°09'51.3", W92°45'30.4"); 1 pregnant female released 14 June 2017 (Colwell Park, 1.8 miles N, 4.6 miles E Floyd P.O.; N43°09'15.3", W92°38'36.6"); 7 pregnant females and 1 adult male released 15 June 2017 (Mather Woods, 0.8 miles S, 0.6 miles E Nora Spring P.O.; N43°07'55.2", W92°59'37.8"); 5 pregnant females, 2 nonreproductive adult females, and 3 adult males released 15 June 2017 (Happy Acres, 3.9 miles N, 2.4 miles E Marble Rock P.O.; N43°01'12.5", W92°49'24.5"); 2 pregnant females and 2 adult males released 15 June 2017 (Ackley Creek Park, 0.7 miles S, 0.3 miles W Marble Rock P.O.; N42°57'05.7", W92°52'35.4"); and 1 lactating female, 1 postlactating female, and 1 juvenile male released 18

Myotis lucifugus (continued)

July 2017 (Tosanak Recreation Area, 0.4 miles N, 1.8 miles W Marble Rock P.O.; N42°58'10.9", W92°54'12.2").

Franklin County (Geographic and Reproductive Records): 3 postlactating females, 2 juvenile females, 1 adult male, and 1 nonreproductive adult female released 26 July 2016 (West Fork Wildlife Area, 4.1 miles N, 8.7 miles E Hampton P.O.; N42°48'06.9", W93°02'07.6"); and 1 lactating female, 12 postlactating females, 4 juvenile females, 1 juvenile male, and 1 adult male released 27 July 2016 (Ingebretson Wildlife Refuge, 0.4 miles N, 2.5 miles W Sheffield P.O.; N42°54'03.3", W93°15'45.8").

Hancock County (Reproductive Records): 1 lactating female and 2 adult males released 29 June 2015 (Pilot Knob State Park, 1.0 miles S, 3.6 miles E Forest City P.O.; N43°15'03.2", W93°33'58.1"); 8 lactating females, 3 nonreproductive adult females, and 10 adult males released 30 June 2015, and 2 postlactating females, 3 nonreproductive adult females, 6 juvenile females, 5 adult males, and 4 juvenile males released 30 July 2015 (Eagle Lake State Park, 1.6 miles N, 3.2 miles E Britt P.O.; N43°07'23.1", W93°44'25.7"); and 4 postlactating females released 15 August 2016 (Eldred Sherwood Recreation Area, 4.4 miles S, 1.7 miles E Klemme P.O.; N42°56'35.2", W93°34'01.3").

Humboldt County (Reproductive Records): 2 postlactating females, 1 juvenile female, 1 adult male, and 1 juvenile male released 20 July 2015 (Bradgate Wildlife Area, 1.3 miles S, 1.1 miles E Bradgate P.O.; N42°47'02.3", W94°23'40.0"); and 2 postlactating females, 1 nonreproductive adult female, 1 juvenile female, 1 adult male, and 1 juvenile female released 21 July 2015 (Lotts Creek Park, 0.1 mile N, 0.7 miles W Livermore P.O.; N42°52'14.2", W94°11'42.3").

Myotis lucifugus (continued)

Jasper County (Geographic and Reproductive Records): 2 nonreproductive adult females and 1 adult male released 29 July 2007 (private property, 0.6 miles N, 6.7 miles E Monroe P.O.; N41°31'42.6", W92°58'14.5"); 2 adult males released 5 June 2012 (Neil Smith NWR, West 109th Street South, 4.9 miles S, 0.8 miles W Prairie City P.O.; N41°31'40.1", W93°15'11.7"); 13 lactating females, 1 postlactating female, and 1 adult male released 10 July 2013 (private property along Wolf Creek, 3.3 miles N, 1.8 miles W Mingo P.O.; N41°49'05.5", W93°18'57.2"); 1 postlactating female released 26 July 2013 (Neal Smith NWR, Savanna Trail, 2.6 miles S, 1.7 miles W Prairie City P.O.; N41°33.365', W93°15.963'); and 1 nonreproductive adult female released 16 June 2016 (Beyers Bridge WMA 0.7 miles N, 6.6 miles E Monroe P.O.; N41°31'56.2", W92°58'39.0").

Johnson County (Reproductive and Seasonal Records): 1 lactating female and 3 juvenile females released 28 July 2011 (private property, 1.7 miles S, 4.6 miles E Solon P.O.; N41°46'27.0", W91°23'51.0"); 1 lactating female, 5 postlactating females, 2 juvenile females, 6 adult males, and 1 juvenile male released 29 July 2011 (private property, 3.7 miles S, 2.1 miles E Solon P.O.; N41°44'43.5", W91°26'49.0"); and 3 juvenile females, 2 adult males, and 2 juvenile males released 30 July 2011 (private property, 0.3 miles S, 3.6 miles E Solon P.O.; N41°47'34.7", W91°25'12.7").

Kossuth County (Reproductive Record) 3 postlactating females, 1 juvenile female, and 1 juvenile male released 31 July 2015 (Union Slough NWR, 0.8 miles N, 2.9 miles E Burt P.O.; N43°12'31.2", W94°09'43.1").

Myotis lucifugus (continued)

Louisa County (Geographic, Reproductive, and Seasonal Records): 3 nonreproductive adult females and 2 adult males released 30 June 2011, and 1 lactating female and 1 nonreproductive adult female released 9 July 2011 (private property along Iowa River, 0.2 miles N, 1.1 miles W Oakville P.O.; N41°06'01.5", W91°03'49.1"); 3 lactating females and 3 adult males released 11 June 2012 (private property along Iowa River, 2.2 miles N, 0.1 miles W Wapello P.O.; N41°12'47.0", W91°11'25.4"); 6 lactating females, 2 postlactating females, 1 juvenile female, and 6 adult males released 12 June 2012 (private property, 0.4 miles S, 0.7 miles E Wapello P.O.; N41°10'32.1", W91°10'18.2"); 1 lactating female released 12 June 2012 (Indian Slough WMA, Turkey Run, 2.5 miles N, 0.6 miles W Wapello P.O.; N41°13'20.3", W91°12'04.7"); 1 lactating female, 1 postlactating female, and 2 adult males released 22 June 2012 (Indian Slough Wildlife Area, 2.0 miles N, 0.6 miles W Wapello P.O.; N41°12'33.6", W91°11'59.5"); and 2 lactating females, 1 postlactating female, and 1 nonreproductive adult female released 25 June 2012 (private property, 1.4 miles N, 0.7 miles E Wapello P.O.; N41°12'04.9", W91°10'25.1").

Lucas County (Reproductive Record): 1 postlactating female, 6 adult males, and 5 juvenile males released 1 August 2005 (private property, 4.4 miles S, 2.1 miles E Russell P.O.; T71N, R20W, Sec. 28 SE ¼).

Madison County (Geographic and Reproductive Records; additional 16 nonreproductive individuals captured not described below): 2 lactating females, 1 nonreproductive adult female, 2 juvenile males, and 8 adult males released 11 July 2005 (Roseman Covered Bridge, 2.9 miles S, 7.0 miles W Winterset P.O.; T75N, R29W, Sec. 14 east-central); 20 adult males released 19 July 2005 (private property, 0.3 miles N, 5.4 miles E Winterset P.O.; T76N, R27W, Sec. 36 NW ¼); 12 adult males, 1 juvenile male, and 1 nonreproductive adult female released 22 July 2005

Myotis lucifugus (continued)

(private property, 4.3 miles N, 2.7 miles W Winterset P.O.; T76N, R28W, SEC. 10 NW $\frac{1}{4}$); 1 lactating female, 1 postlactating female, and 1 juvenile male released 22 July 2005 (bridge for Quail Ridge Ave over North River, 6.3 miles N, 5.4 miles E Winterset P.O.: T77N, R27W, Sec. 36 SW $\frac{1}{4}$ of NW $\frac{1}{4}$); and 2 postlactating females and 6 adult males released 27 August 2005, and 2 postlactating females, 3 nonreproductive adult females, and 7 adult males released 1 September 2011 (private property along North River 3.8 miles N, 3.0 miles W Winterset P.O.; T76N, R28W, Sec. 10 NW $\frac{1}{4}$ of SW $\frac{1}{4}$).

Mahaska County (Reproductive Records): 23 pregnant females, 48 lactating females, 6 nonreproductive adult females, 1 juvenile female, and 15 adult males released 13 June 2006 (private property along Des Moines River, 2.4 miles S, 4.3 miles W Beacon P.O.; T74N, R17W, sec. 1 SE $\frac{1}{4}$ of NW $\frac{1}{4}$); and 6 pregnant females, 17 lactating females, 2 nonreproductive adult females, and 1 adult male released 16 June 2006 (private property, 8 miles S, 6.8 miles W Beacon P.O.; T74W, R17W, sec 27 SW $\frac{1}{4}$ of SW $\frac{1}{4}$).

Marion County (Reproductive Records): 10 lactating females, 1 postlactating female, 1 nonreproductive adult female, 4 juvenile females, 1 adult male, and 4 juvenile males released 6 July 2005, and 14 lactating females, 2 postlactating females, 11 juvenile females, 4 juvenile males, and 10 adult males released 29 June 2007 (private property, 0.3 miles S, 3.8 miles W Dallas P.O.; N41°13'10.7944", W93°19'00.9701"); 4 postlactating females and 1 nonreproductive adult female released 19 August 2005 (private property, 5.9 miles N, 1.7 miles W Pella P.O.; T77N, R18W, Sec. 8 NE $\frac{1}{4}$ of NE $\frac{1}{4}$); and 1 lactating female and 1 adult male released 22 June 2016 (Red Rock WMA—SE, 5.5 miles N, 3.5 miles E Pleasantville P.O.; N41°27'51.7", W93°12'07.8").

Myotis lucifugus (continued)

Mitchell County (Geographic and Reproductive Records): 1 nonreproductive adult female released 26 June 2017 (Hamlin Garland Wildlife Area, 1.7 miles N, 1.5 miles W St. Ansgar P.O.; N43°24'07.1", W92°56'20.2"); 2 pregnant females, 3 lactating females, 2 nonreproductive adult females, and 1 adult male released 27 June 2017 (Otranto Park, 5.4 miles N, 3.5 miles E St. Ansgar P.O.; N43°27'27.7", W92°58'50.2"); 3 lactating females, 3 nonreproductive adult females and 1 adult male released 27 June 2017 (Pinicon Alders Park, 1.1 miles N, 8.5 miles E Staceyville P.O.; N43°27'05.3", W92°36'39.7"); and 1 lactating female, 4 postlactating females, and 8 adult males released 17 July 2017 (private property along Deer Creek, 3.1 miles N, 5.7 miles W St. Ansgar P.O.; N43°25'28.0", W93°01'17.9").

Monroe County (Geographic and Reproductive Records): total of 8 individuals released including 2 postlactating females, 1 juvenile females, 2 nonreproductive adult females, 1 juvenile male, and 2 adult males captured during 5 nights of netting in mid- to late May 2006, mid-July 2009, and early August 2013 (private property, central location—2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1").

Muscatine County (Reproductive Records): 1 lactating female, 1 postlactating female, and 2 nonreproductive adult females released 16 July 2018 (Saulsbury Bridge Recreation Area, 1.4 miles N, 7.3 miles E Nichols P.O.; 41.49789, -91.1675); and 1 lactating female and 1 juvenile male released 18 July 2018 (Richardson Wildlife Area, 8.3 miles S, 0.2 miles E Nichols P.O.; 41.35908, -91.30551).

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Palo Alto County (Geographic and Reproductive Records): 1 lactating female, 1 postlactating female, 1 nonreproductive adult female, 1 juvenile female, 2 adult males, and 2 juvenile males released 22 July 2015 (Brushy Bayou WMA, 4.9 miles S, 1.3 miles E Emmetsburg P.O.; N43°02'17.9", W94°39'12.3"); and 2 lactating females released 30 June 2016 (Basswood Recreation Area, 1.5 miles N, 1 mile W Emmetsburg P.O.; N43°07'57.8", W94°42'15.9").

Polk County (Reproductive Record) 1 juvenile female released 29 July 2010 (property of City of Des Moines, central location—1.3 miles S, 2.1 miles E Des Moines P.O.; N41°33'58.1", W93°34'44.0").

Poweshiek County (Reproductive Records): 1 juvenile male released 12 July 2008 (private property, 5.4 miles S, 1.3 miles W Grinnell P.O.; N41°39'57.3", W92°44'53.7"); 3 lactating females released 20 June 2009, and 1 juvenile female released 11 July 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

Tama County (Geographic and Reproductive Records): 1 postlactating female released 16 July 2012 (private property, 2.9 miles N, 2.9 miles E Chelsea P.O.; N41°57'43.2", W92°19'51.1"); 1 lactating female and 1 postlactating female released 17 July 2012, and 1 adult male released 20 July 2012 (private property along Salt Creek, 3.1 miles S, 0.4 miles E Elberon P.O.; N41°57'48.5", W92°18'49.5"); 1 lactating female, 5 postlactating females, 1 nonreproductive adult female, 3 adult males, and 1 juvenile male released 17 July 2012, and 5 lactating females, 11 postlactating females, 2 nonreproductive adult females, 1 juvenile female, and 7 adult males released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'58.6", W92°18'56.5"); 1 adult male released 18 July 2012 (private property, 3.0 miles S,

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2.5 miles W Elberon P.O.; N41°57'44.3", W92°21'42.0"); and 1 lactating female, 1 postlactating female, 1 nonreproductive adult female, 1 juvenile female, and 3 juvenile males released 19 July 2012 (private property, 3.2 miles N, 0.7 miles W Chelsea P.O.; N41°58'04.0", W92°23'53.7").

Van Buren County (Geographic and Reproductive Records; additional 36 nonreproductive individuals captured not described below): 1 lactating female and 59 adult males released 28 June 2006 (private property, 4.3 miles S, 2.5 miles W Birmingham P.O.; T70N, R10W, sec 34 SW ¼); 3 lactating females, 3 nonreproductive adult females, 1 juvenile male, and 31 adult males released 17 July 2006, 2 lactating females, 23 postlactating females, 8 nonreproductive adult females, 2 juvenile females, 109 adult males, and 7 juvenile males released 26 July 2006, 14 lactating females, 1 postlactating female, 17 nonreproductive adult females, 2 juvenile females, 91 adult males, and 2 juvenile males released 16 July 2007 (private property 1.6 miles N, 4.0 miles W Douds P.O.; T70N, R11W, Sec. 18 NW ¼ SE ¼); 3 nonreproductive adult females and 21 adult males released 19 July 2006 (private property, 2.6 miles N, 3.2 miles W Keosauqua P.O.; T69N, R10W, Sec. 16, SW ¼); and 44 adult males released 5 July 2007 (private property, 4.8 miles S, 1.6 miles W Birmingham. P.O.; T69N, R10W, sec 2 Center).

Wapello County (Reproductive Records): 1 pregnant female, 7 lactating females, and 1 nonreproductive adult female released 24 June 2014 (Rock Bluff Natural Area, 2.4 miles S, 2.4 miles E Chillicothe P.O.; N41°02'59.3", W92°28'58.2"); and 1 lactating female released 25 June 2014 (private property, 2.3 miles S, 2.1 miles E Chillicothe P.O.; N41°03'17.1", W92°29'23.6").

Myotis lucifugus (continued)

Warren County (Geographic and Reproductive Record): 1 lactating female released 23 June 2008 (private property, 6.5 miles N, 2.1 miles W Martensdale P.O.; N41°27'14.7" W93°46'42.0").

Worth County (Reproductive Records): 6 lactating females, 4 postlactating females, 3 nonreproductive adult females, 2 juvenile females, 4 adult males, and 1 juvenile male released 17 July 2017 (Ochee Yahola County Park, 2.7 miles N, 2.1 miles W Northwood P.O.; N43°29'04.3", W93°15'49.5"); 1 postlactating female, 1 nonreproductive adult female, 2 juvenile females, 1 adult male, and 3 juvenile males released 19 July 2017 (Wally's Wood Wildlife Area, 0.6 miles S, 1.7 miles E Fertile P.O.; N43°15'19.6", W93°23'34.8"); 5 postlactating females, 4 adult males, and 5 juvenile males released 19 July 2017 (Stime's Woods, 1.3 miles S, 2.1 miles W Northwood P.O.; N43°25'29.4", W93°15'55.5"); 3 juvenile males released 17 July 2017, 1 juvenile female, 1 adult male, and 1 juvenile female released 19 July 2017 (private property on NE edge of Silver Lake, 2.8 miles N, 10.4 miles W Northwood P.O.; N43°29'05.4", W93°24'23.4").

Wright County (Geographic and Reproductive Record): 1 lactating female, 6 postlactating females, and 2 juvenile males released 25 July 2016 (Pike's Timber, 3.6 miles N, 4.2 miles E Clarion P.O.; N42°47'00.2", W93°38'53.5").

Museum Record (Geographic Record): **Webster County**, Lehigh, collected 17 June 1982 (FHSM 21191).

Myotis septentrionalis

Cherokee County (Geographic and Reproductive Record): 1 juvenile male released 26 July 2018 (Martin Access, 6.5 miles N, 4.3 miles E Cherokee P.O.; 42.84670, -95.47123).

Chickasaw County (Geographic and Reproductive Record): 1 pregnant female released 13 June 2017 (Upper Wapsi Access Area, 6.7 miles S, 2.0 miles W New Hampton P.O.; N42°57'49.4", W92°21'26.4").

Clarke County (Geographic and Reproductive Records): total of 21 individuals released including 1 pregnant female, 10 lactating females, 5 juveniles, and 5 nonreproductive adults captured during 12 nights of netting in late June 2007, early July 2007, late July 2009, early August 2009, mid-June 2013, and mid-July 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0").

Clinton County (Geographic and Reproductive Record): 2 lactating females released 19 July 2018 (Sherman Park, 3.2 miles S, 1.5 miles W Calamus P.O.; 41.77872, -90.78658).

Dallas County (Geographic and Reproductive Records; additional 7 nonreproductive individuals captured not described below): 1 adult male released 30 June 2010, 1 adult male released 9 July 2010 (private property, 0.3 miles N, 1.6 miles E Booneville P.O.; N41°31'39.9", W93°51'21.7"); 3 adult males released 30 June 2010, 1 postlactating female and 3 adult males released 9 July 2010 (private property 1.2 miles S, 1.2 miles E De Soto P.O.; N41°30'55.7", W93°59'19.1"); 1 juvenile female released 27 July 2010 (private property on Sugar Creek, 2.5 miles N, 1.1 miles E Booneville P.O.; N41°33'44.7", W93°51'45.9"); total of 29 individuals released including 14 pregnant females, 2 lactating females, and 13 nonreproductive adults captured during 8 nights of netting in mid-June 2011 (private property 0.1 miles S, 2.5 miles E Booneville P.O.; N41°31'09.9", W93°50'20.2"); 1 adult male released 12 August 2012 (private property, 0.7

Myotis septentrionalis (continued)

miles N, 2.5 miles E Booneville P.O.; N41°32'08.6", W93°50'02.3"); 3 postlactating females released 12 August 2012 (private property, 0.9 miles N, 1.7 miles E Booneville P.O.; N41°32'23.5", W93°51'03.8"); and 1 postlactating female released 15 August 2012 (private property 1.9 miles N, 1.6 miles E Booneville P.O.; N41°33'06.8", W93°51'14.9").

Davis County (Geographic and Reproductive Record): 1 adult male released 26 June 2012, 1 postlactating female and 1 adult male released 11 July 2012 (private property, 10.0 miles N, 0.3 miles W Bloomfield P.O.; N40°53'56.0", W92°24'28.2"); 2 adult males released 28 June 2012 (private property, 5.6 miles N, 0.8 miles E Bloomfield P.O.; N40°50'03.4", W92°23'52.4"); 1 adult male released 3 July 2012 (private property along North Chequest Creek, 5.7 miles N, 0.7 miles E Bloomfield P.O.; N40°50'09.5", W92°24'03.2"); and 1 adult male released 11 July 2012 (private property along Soap Creek, 8.9 miles N, 0.2 miles W Bloomfield P.O.; N40°53'00.1", W92°24'35.3").

Decatur County (Reproductive Records): 1 postlactating female released 6 July 2006, and 1 juvenile male released 22 July 2006 (bridge for County Hwy. R58, over Brush Creek, 1.05 miles S, 5.4 miles E Leon P.O.; T69N, R24W, sec 32 SW ¼ of SW ¼).

Des Moines County (Reproductive Records; additional 4 individuals captured, not described below): 1 lactating female released 7 July 2011, 3 lactating females, 1 juvenile male, and 2 adult males released 8 July 2011; 6 lactating females and 1 juvenile female released 14 July 2011, 2 lactating females, 1 postlactating female, 1 adult female, and 1 juvenile male released 15 July 2011, 1 lactating female and 1 juvenile male released 7 July 2014, 3 juvenile females released 8 July 2014, 1 juvenile male and 1 adult male released 9 July 2014, 3 lactating females and 1 juvenile male released 10 July 2014 (Big Hollow Recreation Area, central location—4.0 miles S,

Myotis septentrionalis (continued)

3.2 miles W Mediapolis P.O.; N40°57'04.8", W91°13'38.0"); and 1 lactating female released 22 June 2012 (private property, 2.8 miles N West Burlington, P.O.; N40°52'05.1", W91°09'36.1").

Floyd County (Geographic and Reproductive Records): 1 pregnant female and 4 adult males released 14 June 2017 (Idlewild County Park, 2.7 miles N, 1.3 miles W Floyd P.O., N43°09'51.3", W92°45'30.4"); 2 pregnant females released 14 June 2017 (Wentland Woods, 1.4 miles N, 1.2 miles E Floyd P.O.; N43°08'26.1", W92°42'42.5"); 2 pregnant females released 14 June 2017 (Colwell Park, 1.8 miles N, 4.6 miles E Floyd P.O.; N43°09'15.3", W92°38'36.6"); and 6 adult males released 15 June 2017 (Mather Woods, 0.8 miles S, 0.6 miles E Nora Spring P.O.; N43°07'55.2", W92°59'37.8").

Franklin County (Geographic and Reproductive Records): 1 postlactating female, 2 adult males, and 1 juvenile released 26 July 2016 (West Fork Wildlife Area, 4.1 miles N, 8.7 miles E Hampton P.O.; N42°48'06.9", W93°02'07.6"); and 3 lactating females, 2 postlactating females, 1 nonreproductive adult female, 1 juvenile female, 5 adult males, and 2 juvenile males released 27 July 2016 (Ingebretson Wildlife Refuge, 0.4 miles N, 2.5 miles W Sheffield P.O.; N42°54'03.3", W93°15'45.8").

Fremont County (Geographic and Reproductive Records): 1 postlactating female and 2 adult males released 15 July 2010; 2 postlactating females and 1 adult male released 16 July 2010 (Manti Memorial Park, 0.6 miles N, 4.1 miles E Fremont P.O.; N40°43'36.6", W95°24'06.6"); N40°43'39.2", W95°23'59.6"); 2 postlactating females and 1 adult male released 15 July 2010; 1 juvenile female released 16 July 2010 (Riverton Wildlife Management Area, 0.1 miles N, 0.6 miles W Riverton P.O.; N40°41'14.9", W95°34'43.8"); and 1 juvenile female, 1 juvenile male,

Myotis septentrionalis (continued)

and 1 adult male released 25 July 2010 (Waubonsie State Park, 5.3 miles S, 2.3 miles W Sidney P.O.; N40°40'27.0", W95°41'22.1").

Guthrie County (Geographic and Reproductive Records): 1 adult male released 7 July 2010 (Springbrook Wildlife Management Area, 5.5 miles N, 1.7 miles E Guthrie Center P.O.; N41°45'37.5", W94°28'07.2"); 2 individuals released 7 July 2010 (Nations Bridge Park, 4.8 miles N, 0.7 miles W Stuart P.O.; N41°34'32.1", W94°19'49.2"); 1 adult female and 1 adult male released 28 July 2010, and 1 postlactating female, 1 nonreproductive adult female, and 1 male juvenile released 5 August 2010 (Middle Raccoon River Wildlife Management Area 1.7 miles S, 0.3 miles W Panora P.O.; N41°39'59.2", W94°22'19.7"); 1 adult male released 6 August 2010 (private property, 1.7 miles S Linden P.O.; T79N, R29W, Sec. 30 SW ¼); and 1 adult male released 6 August 2010 (Bennie Hall Wildlife Area, 0.4 miles S, 1.8 miles W Linden P.O.; T79N, R30W, Sec. 23 NE ¼ of SE ¼).

Hancock County (Geographic and Reproductive Records): 1 adult male released 29 June 2015 (Pilot Knob State Park, 1.0 miles S, 3.6 miles E Forest City P.O.; N43°15'03.2", W93°33'58.1"); and 1 postlactating female and 1 adult male released 15 August 2016 (Eldred Sherwood Recreation Area, 4.4 miles S, 1.7 miles E Klemme P.O.; N42°56'35.2", W93°34'01.3").

Humboldt County (Geographic and Reproductive Records): 2 postlactating females and 1 juvenile male released 20 July 2015, and 3 lactating females and 1 nonreproductive adult female released 28 June 2016 (Joe Sheldon County Park, 0.2 miles N, 1.4 miles W Humboldt P.O.; N42°43'42.1", W94°15'15.6"); 1 postlactating female, 1 juvenile female, 1 juvenile unknown gender, and 2 adult males released 20 July 2015 (Bradgate Wildlife Area, 1.3 miles S, 1.1 miles

Myotis septentrionalis (continued)

E Bradgate P.O.; N42°47'02.3", W94°23'40.0"); 2 juvenile males and 1 adult male released 21 July 2015 (Lotts Creek Park, 0.1 mile N, 0.7 miles W Livermore P.O.; N42°52'14.2", W94°11'42.3").

Jackson County (Reproductive Record): 2 lactating females, 2 postlactating females, and 1 adult male released 10 July 2015 (Prairie Creek Recreation Area, 0.7 miles S, 1.4 miles E Maquoketa P.O.; N42°03'40.9", W90°38'17.0").

Jasper County (Geographic, Hibernation, and Reproductive Records; additional 1 individual captured, not described below): 1 individual observed 6 October 2002, 2 dead individuals observed 4 March 2015, and 6 individuals observed 23 February 2016 (storm sewers in Newton, 0.6 miles N Newton P.O.; T80N, R19W, Sec. 27 SW ¼); 2 adult males released 29 July 2007 (private property 0.6 miles N, 6.7 miles E Monroe P.O.; N41°31'42.6", W92°58'14.5"); 1 adult male released 5 June 2012, 2 lactating females and 2 adult males released 20 June 2016 (Neil Smith NWR, West 109th Street South, 4.9 miles S, 0.8 miles W Prairie City P.O.; N41°31'40.1", W93°15'11.7"); 1 lactating female released 10 July 2013 (private property along Wolf Creek, 3.3 miles N, 1.8 miles W Mingo P.O.; N41°49'05.5", W93°18'57.2"); 1 postlactating female, 1 juvenile female, and 1 adult male released 26 July 2013 (Neal Smith NWR, Savanna Trail, 2.6 miles S, 1.7 miles W Prairie City P.O.; N41°33.365', W93°15.963'); and 1 adult female and 1 adult male released 12 September 2013, 1 pregnant female, 1 lactating female, and 1 adult male released 16 June 2016 (Beyer's Bridge WMA 0.7 miles N, 6.6 miles E Monroe P.O.; T78N, R18W, Sec. 30 NW ¼ of NE ¼).

Myotis septentrionalis (continued)

Johnson County (Reproductive Records; additional 17 individuals captured, not described below): 1 juvenile female, 2 adult males, and 3 juvenile males released 28 July 2011 (private property, 1.7 miles S, 4.6 miles E Solon P.O.; N41°46'27.0", W91°23'51.0"); 5 postlactating females, 1 nonreproductive adult female, 4 juvenile females, and 6 juvenile males released 29 July 2011 (private property, 3.7 miles S, 2.1 miles E Solon P.O.; N41°44'43.5", W91°26'49.0"); 1 juvenile female and 1 adult male released 30 July 2011 (private property, 0.3 miles S, 3.6 miles E Solon P.O.; N41°47'34.7", W91°25'12.7"); and 2 postlactating females, 2 juvenile females, and 1 juvenile male released 31 July 2011 (private property, 0.3 miles S, 4.2 miles E Solon P.O.; N41°47'35.6", W91°24'21.6").

Kossuth County (Geographic and Reproductive Records): 1 lactating female, 1 juvenile female, and 4 juvenile males released 21 July 2015, 1 adult male released 27 June 2016 (Smith Wildlife Area, 2.7 miles S, 0.5 miles E Algona P.O.; N43°01'35.3", W94°13'08.8"); and 1 lactating female released 27 July 2016 (Geigel Woods County Park, 2.1 miles S, 2.0 miles E Algona P.O.; N43°02'22.1", W94°11'22.3").

Lee County (Geographic Records): 1 adult male released 5 August 2007, 1 adult male released 13 August 2007 (private property; 0.7 miles N, 3.4 miles W of Fort Madison P.O.; N40°38'27.0", W91°22'48.1"); and 2 individuals released 13 August 2007 (private property 0.5 miles N, 3.4 miles W Fort Madison P.O.; N40°38'14.3", W91°22'50.2").

Louisa County (Geographic, Reproductive, and Seasonal Records; additional 3 nonreproductive individuals captured, not described below): 2 lactating females and 1 adult male released 30 June 2011, 2 lactating female, 1 nonreproductive adult female, and 2 adult males released 9 July

Myotis septentrionalis (continued)

2011, 3 lactating females, 1 postlactating female, 1 juvenile female, and 1 adult male released 10 July 2011 (private property along Iowa River, 0.2 miles N, 1.1 miles W Oakville P.O.; N41°06'01.5", W91°03'49.1"); 1 adult male released 11 June 2012, 3 lactating females, 1 postlactating female, 3 juvenile males, 2 adult males, and 1 adult female released 25 June 2012 (private property, 1.4 miles N, 0.7 miles E Wapello P.O.; N41°12'04.9", W91°10'25.1"); 2 lactating females, 1 postlactating female, and 2 male adults released 11 June 2012 (private property along Iowa River, 2.2 miles N, 0.1 miles W Wapello P.O.; N41°12'47.0", W91°11'25.4"); 6 lactating females and 1 adult male released 14 June 2012, 1 lactating female and 1 adult male released 25 June 2012 (private property, 7.2 miles S, 0.2 miles E Wapello P.O.; N41°04'29.4", W91°10'54.0"); and 9 lactating females, 2 postlactating females, 2 adult males, and 1 adult female released 22 June 2012 (Indian Slough Wildlife Area, 2.0 miles N, 0.6 miles W Wapello P.O.; N41°12'33.6", W91°11'59.5").

Lucas County (Reproductive Records): 3 lactating females and 1 juvenile male released 22 July 2008; 1 postlactating female and 1 juvenile male released 2 August 2008; 1 postlactating and 1 adult male released 13 August 2008 (Lake Morris 0.3 miles S, 3.0 miles E Chariton P.O.; N41°00'41.6", W93°15'07.4"); and 1 lactating female released 26 June 2009 (Stephens State Forest, Lucas Unit, 1.0 miles S, 1.1 miles W Lucas P.O.; N41°00'55.5", W93°28'50.3").

Madison County (Geographic and Reproductive Records; additional 6 nonreproductive individuals captured, not described below): 1 lactating female, 1 juvenile female, and 1 adult male released 11 July 2005 (Roseman Covered Bridge, 2.9 miles S, 7.0 miles W Winterset P.O.; T75N, R29W, Sec. 14 east-central); 2 adult males released 12 July 2005 (Holliwell Covered Bridge, 0.9 miles S, 2.8 miles E Winterset P.O.; T75N, R27W, Sec. 4 NE ¼); 2 adult males

Myotis septentrionalis (continued)

released 26 July 2005 (private property, 1.95 miles S, 0.7 miles E Winterset P.O.; T75N, R27W, Sec. 7 center); 1 juvenile male released 29 July 2005, 1 lactating female and 1 adult male released 27 June 2006 (private property, 2.3 miles N, 0.9 miles E Patterson P.O.; T76N, R26W, Sec. 16 NW ¼ of SW ¼); 1 individual released 27 August 2005 (private property along North River 3.8 miles N, 3.0 miles W Winterset P.O.; T76N, R28W, Sec. 10 NW ¼ of SW ¼); and 2 pregnant females, 1 lactating female, and 2 adult males released 15 June 2016 (Heritage Hills WMA, 2.9 miles S, 6.9 miles W Truro P.O.; N41°09'56.1", W93°58'09.3").

Mahaska County (Geographic and Reproductive Records): 1 lactating female and 1 adult male released 14 July 2006 (private property, 0.7 miles N, 8.6 miles W Beacon P.O.; T75N, R17W, sec. 20 NW ¼); 2 lactating females released 3 July 2007 (Eveland Access, Scheet's Addition, 3.0 miles S, 2.9 miles W Beacon P.O.; T74N, R16W, Sec. 6 SE ¼ of SE ¼); and 1 male adult released 7 July 2015 (Cedar Bluff Natural Area, 1.3 miles S, 7.5 miles W Beacon P.O.; N41°15'25.4", W92°49'20.4").

Marion County (Reproductive and Seasonal Records; additional 2 lactating females captured, not described below): 1 adult male released 14 April 2003 (Big Rock City Park, 1.2 miles N, 0.6 miles W Pella P.O.; N41°25'24.8", W92°55'49.7"); 1 juvenile female and 1 adult male released 15 July 2005 (Hammond Covered Bridge, 0.1 miles S, 3.2 miles W Maryville town center; T74N, R19W, Sec. 26 south central); 1 postlactating female and 1 adult female released 2 August 2005, 1 postlactating female released 5 August 2005, 2 lactating females released 28 June 2007, 1 postlactating female released 13 September 2009 (private property, 5.9 miles N, 1.7 miles W Pella P.O.; T77N, R18W, Sec. 8 NE ¼ of NE ¼); 1 postlactating female released 6 August 2008 (Roberts Creek Park, west campground, 1.2 miles N, 7.5 miles W Pella P.O.;

Myotis septentrionalis (continued)

T77N, R19W, Sec. 32 SE ¼); 2 lactating females released 8 July 2009, 1 lactating female released 9 July 2009 (Lake Red Rock, North Overlook Campground, 1.9 miles S, 2.6 miles W Pella P.O.; N41°22.51.4, W92°58.07.9); 1 postlactating female and 1 adult male released 5 September 2013 (private property along Sand Creek, 5.2 miles S, 1.5 miles E Pella P.O.; N41°19'42.1", W92°53'18.5"); 1 adult male released 22 September 2013 (private property along English Creek 2.8 miles S, 2.1 miles W Knoxville P.O.; T75N, R20W, Sec. 26 NW ¼ of NW ¼); and 1 juvenile male released 13 July 2015 (Central College Field Station, 2.4 miles S, 5.1 miles W Pella P.O.; N41°22'13.4", W93°01'01.1").

Mitchell County (Geographic and Reproductive Records): 1 pregnant female and 2 lactating females released 26 June 2017 (Hamlin Garland Wildlife Area, 1.7 miles N, 1.5 miles W St. Ansgar P.O.; N43°24'07.1", W92°56'20.2"); 1 lactating female released 26 June 2017 (New Haven Potholes Wildlife Area, 1.4 miles N, 6.5 miles E Osage P.O.; N43°18'22.5", W92°40'44.5"); 4 lactating females and 2 pregnant females released 27 June 2017 (Otranto Park, 5.4 miles N, 3.5 miles E St. Ansgar P.O.; N43°27'27.7", W92°58'50.2"); 3 lactating females and 1 nonreproductive adult female released 27 June 2017 (Pinicon Alders Park, 1.1 miles N and 8.5 miles E Staceyville P.O.; N43°27'05.3", W92°36'39.7"); and 2 postlactating females and 1 juvenile male released 17 July 2017 (Private Property along Deer Creek, 3.1 miles N and 5.7 miles W St. Ansgar P.O.; N43°25'28.0", W93°01'17.9").

Monroe County (Geographic and Reproductive Records): total of 13 individuals released including 1 lactating female, 1 postlactating female, 4 juveniles, and 7 nonreproductive adults captured during 7 nights of netting in mid-July 2009, early and mid-August 2009, and early

Myotis septentrionalis (continued)

August 2013 (private property, central location—2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1").

Palo Alto County (Geographic Record): 1 adult male released 22 July 2015 (Brushy Bayou WMA, 4.9 miles S, 1.3 miles E Emmetsburg P.O.; N43°02'17.9", W94°39'12.3").

Polk County (Geographic and Reproductive Records): 1 nonreproductive adult female and 1 adult male released 29 July 2010, 2 nonreproductive adult females released 9 August 2010, and 1 juvenile male released 10 August 2010 (property of City of Des Moines, central location—1.3 miles S, 2.1 miles E Des Moines P.O.; N41°33'58.1", W93°34'44.0").

Pottawattamie County (Geographic and Reproductive Records): 2 nonreproductive adult females and 2 adult males released 5 June 2009, 1 lactating female, 1 postlactating female, 2 juvenile females, 2 juvenile males, and 2 adult males released 14 July 2010 (Hitchcock County Park, 4.7 miles N, 0.5 miles W Crescent P.O.; N41°25'08.9", W95°52'05.1"); 1 lactating female and 1 juvenile female released 8 July 2010, 1 postlactating female, 1 juvenile female, and 1 adult male released 13 July 2010 (private property along West Nishnabotna River, 1.4 miles N, 1.3 miles W Griswold P.O.; N41°15'16.3", W95°09'58.6").

Poweshiek County (Geographic and Reproductive Records): 1 nonreproductive adult female released 10 June 2008, 1 lactating female released 9 July 2008 (private property, 5.4 miles S, 1.3 miles W Grinnell P.O.; N41°39'57.3", W92°44'53.7"); 1 pregnant female, 2 lactating females, and 1 nonreproductive adult female released 16 June 2009, 1 pregnant female and 1 lactating female released 20 June 2009, 2 lactating females and 2 postlactating female released 1 July

Myotis septentrionalis (continued)

2009, and 1 juvenile male and 1 adult male released 11 July 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

Story County (Geographic and Reproductive Records): 1 lactating female and 1 juvenile female released 24 July 2013, 1 lactating female released 25 June 2015 (Robison Wildlife Acres, 2.8 miles N, 2.1 miles W Maxwell P.O.; N41°55'52.6", W93°26'22.7"); and 1 lactating female released 23 June 2015 (private property, 2.9 miles N, 1.8 miles W Maxwell P.O.; N41°55'52.0", W93°26'22.2").

Tama County (Geographic and Reproductive Records): 1 postlactating female and 1 juvenile female released 16 July 2012, 1 postlactating and 1 adult male released 18 July 2012 (private property, 2.9 miles N, 2.9 miles E Chelsea P.O.; N41°57'43.2", W92°19'51.1"); 2 nonreproductive adult females and 1 adult male released 16 June 2012, 5 postlactating females, 5 juvenile females, 1 adult female, and 3 adult males released 19 July 2012 (private property, 3.2 miles N, 0.7 miles W Chelsea P.O.; N41°58'04.0", W92°23'53.7"); 1 postlactating female and 1 adult male released 17 July 2012, 1 postlactating female, 1 juvenile female, 1 juvenile male, and 1 adult male released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'58.6", W92°18'56.5"); 1 postlactating female, 1 juvenile female, and 1 adult male released 17 July 2012, 1 postlactating female released 20 July 2012 (private property along Salt Creek, 3.1 miles S, 0.4 miles E Elberon P.O.; N41°57'48.5", W92°18'49.5"); and 1 adult male released 18 July 2012, 1 nonreproductive adult female and 1 adult male released 19 July 2012 (private property 3.0 miles S, 2.5 miles W Elberon P.O.; N41°57'44.3", W92°21'42.0").

Myotis septentrionalis (continued)

Taylor County (Geographic and Reproductive Record): 1 juvenile male and 1 adult male released 2 August 2010 (Lake of Three Fires State Park, 2.8 miles N, 1.6 miles E Bedford P.O.; N40°42'25.7", W94°41'15.3").

Van Buren County (Reproductive Records): 1 lactating female and 1 adult male released 28 June 2008 (private property, 3.8 miles S, 2.8 miles W Birmingham P.O.; T70N, R10W, Sec. 34 SW ¼ of NW ¼); and 1 lactating female and 2 adult males released 1 July 2008 (private property along Lick Creek, 3.25 miles S, 1.8 miles E Birmingham P.O.; T70N, R9W, Sec. 29 SE ¼ of SE ¼).

Wapello County (Geographic and Reproductive Records; additional 1 nonreproductive individual and 1 juvenile captured, not described below): 1 lactating female released 26 June 2012 (private property, 5.2 miles S, 0.5 miles E Ottumwa P.O.; N40°56'54.4", W92°24'29.5"); 1 lactating female released 27 June 2012 (private property, 7.0 miles S, 0.5 miles E Ottumwa P.O.; N40°55'26.7", W92°24'25.4"); 3 lactating females, 1 juvenile male, and 4 adult males released 2 July 2012, 1 juvenile female released 7 July 2012 (Pioneer Ridge County Park, 7.8 miles S, 0.5 miles E Ottumwa P.O.; N40°54'30.5", W92°24'30.2"); 1 postlactating female released 5 July 2012 (private property on Village Creek, 4.7 miles S, 0.7 miles E Ottumwa P.O.; N40°57'21.1", W92°24'13.0"); 1 lactating female, 3 juvenile females, 1 nonreproductive adult female, and 3 adult males released 6 July 2012 (private property, 7.2 miles S, 0.5 miles E Ottumwa P.O.; N40°55'09.6", W92°24'26.5"); and 1 pregnant female released 11 June 2014 (private property, 2.1 miles S, 1.9 miles E Chillicothe P.O.; N41°03'20.7", W92°29'36.0").

Warren County (Geographic and Reproductive Record): 2 adult males released 16 June 2008 (private property, 2.7 miles S, 2.2 miles W Martensdale P.O.; N41°20'02.1", W93°46'50.7"); 1

Myotis septentrionalis (continued)

adult female released 17 June 2008 (private property, 2.1 miles W Martensdale P.O.; N41°22'23.41" W93°46'44.63"); 1 pregnant female and 1 adult male released 18 June 2008 (private property, 1.6 miles N, 2.2 miles W Martensdale P.O.; N41°23'52.8", W93°46'51.8"); and 1 pregnant female and 2 adult males released 18 June 2008 (private property, 1.65 miles N, 2.1 miles W Martensdale P.O.; N41°23'54.0", W93°46'45.8").

Worth County (Geographic and Reproductive Records): 1 nonreproductive adult female released 28 June 2017, 1 juvenile male released 17 July 2017 (Ochee Yahola County Park, 2.7 miles N, 2.1 miles W Northwood P.O.; N43°29'04.3", W93°15'49.5"); 1 lactating female released 19 July 2017 (Wally's Wood Wildlife Area, 0.6 miles S, 1.7 miles E Fertile P.O.; N43°15'19.6", W93°23'34.8"); and 1 juvenile female and 1 juvenile male released 19 July 2017 (Stime's Woods, 1.3 miles S, 2.1 miles W Northwood P.O.; N43°25'29.4", W93°15'55.5).

Wright County (Geographic Record): 1 nonreproductive adult female released 25 July 2016 (Pike's Timber, 3.6 miles N, 4.2 miles E Clarion P.O.; N42°47'00.2", W93°38'53.5").

Museum Records (Geographic Records): **Fremont County**, Waubonsie State Park, 5.5 miles W Riverton, 1 collected by John Bowles, 4 June 1977 (SUI 34108); **Mitchell County**, 1.5 miles N, 2 miles E Riceville, 1 collected 28 July 1982 (FHSM 21188); **Webster County**, 1 mile N, 3.5 miles E Burnside, 1 collected by A. Fors, 4 September 1981 (FHSM 19510); Lehigh, 3 collected 19 June 1982 (FHSM 21193–21195); 1.5 miles E Coalville, 1 collected 27 June 1982 (FHSM 21190).

Myotis sodalis (only select records described)

Clarke County (Geographic, Reproductive, and Seasonal Records): 1 lactating female released 23 June 2007, 2 lactating females released 30 June 2007, 1 lactating female released 23 July 2009, 1 lactating female and 1 juvenile male released 1 August 2009, and 1 pregnant female released 19 June 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0").

Dallas County (Geographic and Reproductive Records): 2 pregnant females released 8 June 2011, 1 pregnant female released 16 June 2011, 1 pregnant female released 21 June 2011, 1 pregnant female released 23 June 2011 (private property, 0.1 miles S, 2.5 miles E Booneville P.O.; N41°31'09.9", W93°50'20.2"); and 1 postlactating female released 14 August 2012 (private property, 2.0 miles N, 1.8 miles E Booneville P.O.; N41°33'19.7", W93°51'03.2").

Davis County (Reproductive and Seasonal Records; additional 1 juvenile individual captured, not described below): 1 lactating female and 1 adult male released 29 June 2012 (private property, 7.2 miles N, 0.9 miles E Bloomfield P.O.; N40°51'25.4", W92°23'48.8"); 1 lactating female released 2 July 2012 (private property along Soap Creek, 9.1 miles N, 0.3 miles W Bloomfield P.O.; N40°53'12.7", W92°24'37.3"); and 1 lactating female and 1 juvenile male released 3 July 2012 (private property, 7.3 miles N, 0.8 miles E Bloomfield P.O.; N40°51'25.9", W92°24'00.6").

Decatur County (Reproductive Record): 1 lactating female and 1 adult male released 6 July 2006 (bridge for County Hwy. R58, over Brush Creek, 1.05 miles S, 5.4 miles E Leon P.O.; T69N, R24W, sec 32 SW ¼ of SW ¼).

Myotis sodalis (continued)

Des Moines County (Geographic and Reproductive Records): 4 lactating females released 7 July 2011, 7 lactating females released 8 July 2011, 1 postlactating female released 14 July 2011, 1 lactating female released 7 July 2014, 2 lactating females and 1 adult male released 8 July 2014, and 2 lactating females and 1 adult male released 10 July 2014 (Big Hollow Recreation Area, central location—4.0 miles S, 3.2 miles W Mediapolis P.O.; N40°57'04.8", W91°13'38.0").

Guthrie County (Geographic and Reproductive Record): 1 postlactating female released 28 July 2010 (Middle Raccoon River WMA, 2.7 miles S, 2.0 miles E Panora P.O.; N41°39'03.5", W94°19'16.0").

Jasper County (Reproductive Records): 1 postlactating female released 30 August 2005 (Beyer's Bridge WMA, 0.7 miles N, 6.6 miles E Monroe P.O.; T78N, R18W, Sec. 30 NW ¼ of NE ¼); and 1 postlactating female and 1 juvenile male released 29 July 2007 (private property, 0.6 miles N, 6.7 miles E Monroe P.O.; N41°31'42.6", W92°58'14.5").

Louisa County (Geographic, Reproductive, and Seasonal Records): 2 lactating females released 11 June 2012 (private property along Iowa River, 2.2 miles N, 0.1 miles W Wapello P.O.; N41°12'47.0", W91°11'25.4"); 4 lactating females released 12 June 2012 (Indian Slough WMA, Turkey Run, 2.5 miles N, 0.6 miles W Wapello P.O.; N41°13'20.3", W91°12'04.7"); 2 lactating females released 12 June 2012 (private property, 0.4 miles S, 0.7 miles E Wapello P.O.; N41°10'32.1", W91°10'18.2"); and 3 lactating females and 2 nonreproductive adult females released 25 June 2012 (private property, 1.4 miles N, 0.7 miles E Wapello P.O.; N41°12'04.9", W91°10'25.1").

Myotis sodalis (continued)

Lucas County (Reproductive Record): 5 lactating females released 26 June 2009 (Stephens State Forest, Lucas Unit, 1.0 miles S, 1.1 miles W Lucas P.O.; N41°00'55.5", W93°28'50.3").

Madison County (Geographic and Reproductive Records; additional 1 nonreproductive individual captured, not described below): 2 postlactating females released 29 July 2005, 1 lactating female released 27 June 2006 (private property, 2.3 miles N, 0.9 miles E Patterson P.O.; T76N, R26W, Sec. 16 NW ¼ of SW ¼); and 1 pregnant female released 9 June 2017 (Heritage Hills WMA, 2.9 miles S, 6.9 miles W Truro P.O.; N41°09'56.1", W93°58'09.3").

Mahaska County (Geographic Record): 1 adult male released 12 June 2006 (Eveland Access, Scheet's Addition, 3.0 miles S, 2.9 miles W Beacon P.O.; T74N, R16W, Sec. 6 SE ¼ of SE ¼).

Marion County (Reproductive and Seasonal Records): 2 postlactating females and 1 adult male released 1 September 2005 (private property along Sand Creek, 5.2 miles S, 1.5 miles E Pella P.O.; N41°19'42.1", W92°53'18.5"); 1 nonreproductive adult female released 8 October 2009 (bridge for County Hwy. T-25 over English Creek, 7.5 miles S, 1.75 miles E Pella P.O.; T75N, R18W, Sec. 13 SW ¼); 1 adult male released 7 October 2010 (bridge for Hwy. 92 over English Creek, 6.8 miles S, 1.1 miles E Pella P.O.; T75N, R18W, Sec. 11 SW ¼ of SE ¼); 1 postlactating female, 1 nonreproductive adult female, and 1 adult male released 22 September 2013 (private property along English Creek 2.8 miles S, 2.1 miles W Knoxville P.O.; T75N, R20W, Sec. 26 NW ¼ of NW ¼); 1 postlactating female released 25 August 2016 (bridge for Hwy. 92 over English Creek, 6.8 miles S, 1.1 miles E Pella P.O.; T75N, R18W, Sec. 11 SW ¼ of SE ¼); and 1 adult female released 16 April 2017 (saw but did not capture three additional *Myotis sodalis*; bridge for Hwy. 92 over English Creek, 6.8 miles S, 1.1 miles E Pella P.O.;

Myotis sodalis (continued)

T75N, R18W, Sec. 11 SW ¼ of SE ¼).

Monroe County (Reproductive Records): 1 lactating female and 1 adult male released 18 July 2009, 1 juvenile female released 5 August 2009, 1 juvenile male released 8 August 2013 (private property, central location—2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1"); and 2 postlactating females released 7 September 2009 (private property, 4.0 miles S, 4.5 miles W Eddyville P.O.; N41°06'19.5", W92°43'41.4").

Muscatine County (Geographic and Reproductive Record): 2 lactating females released 18 July 2018 (Richardson Wildlife Area, 8.3 miles S, 0.2 miles E Nichols P.O.; 41.35908, -91.30551).

Poweshiek County (Geographic and Reproductive Records): 1 adult male released 10 June 2008 (private property, 6 miles S, 1.6 miles W Grinnell P.O.; N41°39'27.2", W92°45'16.1"); and 1 pregnant female and 1 lactating female released 16 June 2009, 2 adult males released 20 June 2009, and 1 adult male released 1 July 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

Tama County (Geographic Record): 1 adult male released 19 July 2012 (private property, 3.2 miles N, 0.7 miles W Chelsea P.O.; N41°58'04.0", W92°23'53.7").

Van Buren County (Reproductive Records): 1 lactating female released 29 June 2006 (private property, 4.8 miles S, 1.6 miles W Birmingham. P.O; T69N, R10W, sec 2 Center); 2 lactating females and 2 juvenile males released 26 July 2006 (private property, 1.6 miles N, 4.0 miles W Douds P.O.; T70N, R11W, Sec. 18 NW ¼ SE ¼); 1 lactating female and 1 adult male released 5 July 2007 (private property, 4.8 miles S, 1.6 miles W Birmingham. P.O; T70N, R10 W, Sec. 34

Myotis sodalis (continued)

SW ¼); 1 lactating female, 1 nonreproductive adult female, and 1 adult male released 16 July 2007 (private property, 1.6 miles N, 4.0 miles W Douds P.O.; T70N, R11W, Sec. 18 NW ¼ SE ¼); 3 juvenile females and 4 juvenile males released 18 July 2007 (bridge for Hwy. V64 over Chequest Creek, 4.8 miles S, 0.3 miles W Douds P.O.; N40°46'18.8", W92°05'29.9"); 9 lactating females and 8 adult males released 28 June 2008, 1 juvenile female, 1 juvenile male, and 1 adult male released 16 August 2013 (private property, 3.8 miles S, 2.8 miles W Birmingham P.O.; N40°49'21.0", W92°00'09.2"); and 5 postlactating females, 1 nonreproductive adult female, 2 juvenile females, and 1 adult male released 9 August 2008 (private property along Lick Creek, 4.8 miles S, 1.1 miles W Birmingham P.O.; N40°48'32.3", W91°58'03.7").

Wapello County (Reproductive and Seasonal Records): 3 lactating females and 1 adult male released 26 June 2012 (private property, 5.2 miles S, 0.5 miles E Ottumwa P.O.; N40°56'54.4", W92°24'29.5"); 1 lactating female released 27 June 2012 (private property, 7.0 miles S, 0.5 miles E Ottumwa P.O.; N40°55'26.7", W92°24'25.4"); 2 lactating female and 4 adult males released 2 July 2012 (Pioneer Ridge County Park, 7.8 miles S, 0.5 miles E Ottumwa P.O.; N40°54'30.5", W92°24'30.2"); 1 postlactating female, 1 juvenile male, and 1 adult male released 5 July 2012 (private property, 4.7 miles S, 0.7 miles E Ottumwa P.O.; N40°57'21.1", W92°24'13.0"); and 3 postlactating females released 6 July 2012 (private property, 7.2 miles S, 0.5 miles E Ottumwa P.O.; N40°55'09.6", W92°24'26.5").

Warren County (Geographic and Reproductive Record): 6 pregnant females released 16 June 2008 (private property, 2.7 miles S, 2.1 miles W Martensdale P.O.; T75N, R25W, Sec. 6 NW ¼ of NE ¼); and 4 pregnant females and 1 adult male released 18 June 2008 (private property, 1.65 miles N, 2.1 miles W Martensdale P.O.; T76N, R25W, Sec. 7 SW ¼ of SE ¼).

Nycticeius humeralis

Adams County (Geographic and Reproductive Records): 2 juvenile females released 22 July 2010 (private property along East Nodaway River, 1.7 miles S, 5.1 miles W Corning P.O.; N40°57'58.0", W94°50'08.0"); and 1 juvenile male and 1 juvenile female released 26 July 2010 (private property, 5.9 miles S, 7.0 miles W Corning P.O.; N40°54'21.7", W94°52'04.8").

Clarke County (Geographic, Reproductive and Seasonal Records): total of 38 individuals released including 18 lactating females (including 4 on 19 June 2013 and 1 on 18 July 2013), 5 postlactating females, and 15 juveniles captured during 10 nights of netting in late July 2009, early August 2009, late June 2013, and mid-July 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0").

Floyd County (Geographic, Reproductive and Seasonal Record): 1 lactating female released 18 July 2017 (Tosanak Recreation Area, 0.4 miles N, 1.8 miles W Marble Rock P.O.; N42°58'10.9", W92°54'12.2").

Fremont County (Geographic and Reproductive Records): 1 juvenile female released 15 July 2010 (Riverton Wildlife Management Area, 0.1 miles N, 0.6 miles W Riverton P.O.; N40°41'14.9", W95°34'43.8"); 2 juvenile males and 3 juvenile females released 16 July 2010 (Riverton Wildlife Management Area, 0.7 miles N, 0.1 miles E Riverton P.O.; N40°41'48.8", W95°34'01.1").

Guthrie County (Geographic and Reproductive Record): 1 juvenile female released 5 August 2010 (Middle Raccoon River Wildlife Management Area, 2.8 miles S, 2.0 miles E Panora P.O.; N41°39'03.5", W94°19'16.0").

Nycticeius humeralis (continued)

Jasper County (Geographic and Reproductive Records): 1 juvenile female released 17 August 2005 (Beyer's Bridge Wildlife Management Area, 0.7 miles N, 6.6 miles E Monroe P.O.; T78N, R18W, Sec. 30 NW ¼ of NE ¼); and 2 juvenile females released 29 July 2007 (private property, 0.6 miles N, 6.7 miles E Monroe P.O.; N41°31'42.6", W92°58'14.5").

Johnson County (Geographic and Reproductive Record): 1 juvenile male released 31 July 2011 (private property, 1.5 miles S, 1.8 miles E Solon P.O.; N41°47'35.6" and W91°24' 21.6").

Louisa County (Geographic, Reproductive, and Seasonal Record): 1 postlactating female released 22 June 2012 (Indian Slough Wildlife Area, 2.0 miles N, 0.6 miles W Wapello P.O.; N41°12'33.6", W91°11'59.5").

Lucas County (Reproductive Record): 1 postlactating female released 13 August 2008 (Lake Morris, 0.3 miles S, 3.0 miles E Chariton P.O.; N41°00'41.6", W93°15'07.4").

Madison County (Reproductive Record): 1 postlactating female released 1 September 2011 (private property along North River, 3.8 miles N, 3.0 miles W Winterset P.O.; T76N, R28W, Sec. 10 NW ¼ of SW ¼).

Marion County (Reproductive and Seasonal Records): 1 adult female released 28 April 2004, 1 juvenile male and 1 juvenile female released 19 August 2005, 1 postlactating female and 1 juvenile male released 5 September 2013, and 2 adult females released 10 September 2017 (private property along Sand Creek, 5.2 miles S, 1.5 miles E Pella P.O.; N41°19'42.1", W92°53'18.5"); 1 juvenile female released 8 July 2009 (Lake Red Rock, North Overlook Campground, 1.6 miles S, 2.6 miles W Pella P.O.; N41°22'51.4", W92°58'07.9"); and 1

Nycticeius humeralis (continued)

postlactating female released 6 September 2013 (Central College Field Station, 2.4 miles S, 5.1 miles W Pella P.O.; N41°22'13.4," W93°01'01.1").

Monroe County (Geographic and Reproductive Records): total of 15 individuals released including 2 postlactating females and 13 juveniles captured during 7 nights of netting in mid-July 2009, early August 2009, early August 2013 (private property, central location—2.0 miles S, 2.0 miles W Eddyville P.O.; N41°07'49.7", W92°40'28.1").

Muscatine County (Geographic and Reproductive Record): 1 juvenile male released 16 July 2018 (Saulsbury Bridge Recreation Area, 1.4 miles N, 7.3 miles E Nichols P.O.; 41.49789, -91.1675).

Polk County (Reproductive Records): 1 juvenile male and 1 juvenile female released 8 August 2010, and 1 juvenile male released on 9 August 2010 (property of City of Des Moines, 1.3 miles S, 2.1 miles E Des Moines P.O.; N41°33'58.1", W93°34'44.0").

Pottawattamie County (Geographic and Reproductive Record): 1 juvenile female released 13 July 2010 (private property along West Nishnabotna River, 1.2 miles N, 1.2 miles W Griswold P.O.; N41°15'16.3", W95°09'58.6").

Tama County (Geographic and Reproductive Records): 1 juvenile female released 17 July 2012, and 1 postlactating female released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'59.1", W92°19'02.3").

Taylor County (Reproductive Records): 2 juvenile males and 1 juvenile female released 2 August 2010 (Lake of Three Fires State Park, 2.9 miles N, 1.5 miles E Bedford P.O.;

Nycticeius humeralis (continued)

N40°42'25.7", W94°41'15.3"); and 2 juvenile females released 3 August 2010 (Sands Timber Recreation Area, 0.8 miles N, 1.4 miles W Blockton P.O.; N40°37'35.3", W94°30'11.6")

Van Buren County (Reproductive Records): 2 lactating females released 15 July 2008 (private property along Lick Creek, 1.8 miles S, 2.1 miles W Birmingham P.O.; N40°51'10.5", W91°59'38.2"); and 1 postlactating female, 2 juvenile females, and 1 juvenile male released 9 August 2008 (private property along Lick Creek, 5.5 miles N, 0.3 miles W Keosauqua P.O.; N40°48'32.3", W91°58'03.7").

Wapello County (Geographic, Reproductive, and Seasonal Records): 1 postlactating female and 1 juvenile female released 28 June 2012 (private property, 6.1 miles S, 0.5 miles E Ottumwa P.O.; N40°56'09.0", W92°24'24.3"); 1 lactating female released 5 July 2012 (private property, 3.8 miles S, 0.7 miles E Ottumwa P.O.; N40°58'05.1", W92°24'09.7"); 1 juvenile female released 5 July 2012 (private property, 4.7 miles S, 0.7 miles E Ottumwa P.O.; N40°57'21.1", W92°24'13.0"); 1 juvenile male released 7 July 2012 (Pioneer Ridge County Park, 8.2 miles S, 0.5 miles E Ottumwa P.O.; N40°54'14.9", W92°24'27.8"); and 1 lactating female released 26 June 2014 (private property, 0.2 miles S, 0.2 miles E Chillicothe P.O.; N41°05'01.8", W92°31'30.3").

Museum Records (Geographic Records): **Davis County**, 6 miles SE Pulaski, 11 collected by Larry Watkins, 10 June 1971 (KU 127673–127683); **Monona County**, 3 miles S, 5.5 miles E Blencoe, 1 collected by John Bowles and R. Watts, 2 June 1982 (SUI 34112).

Perimyotis subflavus

Chickasaw County (Geographic and Reproductive Record): 1 pregnant female released 13 June 2017 (Upper Wapsi Access Area, 6.7 miles S, 2.0 miles W New Hampton P.O.; N42°57'52.0", W92°21'25.8").

Clarke County (Geographic and Reproductive Records): 1 juvenile male released 16 July 2013; 1 adult male released 18 July 2013 (private property along Whitebreast Creek, central location—2.1 miles S, 1.9 miles W Osceola P.O.; N41°00'04.5", W93°48'11.0").

Davis County (Geographic, Reproductive, and Seasonal Record): 1 juvenile female released 11 July 2012 (private property, 10.0 miles N, 0.3 miles W Bloomfield P.O.; N40°53'56.0", W92°24'28.2").

Des Moines County (Geographic and Hibernation Records): 1 adult male released 13 June 2012 (private property, 1.5 miles N, 0.2 miles E West Burlington P.O.; N40°50'53.2", W91°09'15.8"); 1 adult male released 13 June 2012 (private property on Knotty Creek, 2.1 miles N, 0.7 miles W West Burlington P.O.; N40°51'21.2", W91°09'13.9"); 1 adult male released 14 June 2012 (private property, 2.7 miles N, 0.1 miles E West Burlington P.O.; N40°52'05.4", W91°09'35.4"); and 8 bats observed hibernating 26 February 2015 (Starr's Hollow Cave, 2.5 miles N, 1.7 miles E West Burlington P.O.; N40°51'06.7", W91°08'15.8").

Guthrie County (Geographic and Reproductive Record): 1 juvenile male released 4 August 2010 (private property along Middle Raccoon River, 0.6 miles S, 1.4 miles W Linden P.O.; N41°37'56.6", W94°17'57.6").

Perimyotis subflavus (continued)

Jasper County (Hibernation Records): 1 individual observed but not captured 6 October 2002, 2 individuals observed but not captured 4 March 2015 (Newton, 0.6 miles N Newton P.O.; T80N, R19W, Sec. 27 SW $\frac{1}{4}$).

Madison County (Geographic and Reproductive Records): 5 adult males released 27 August 2005, and 2 postlactating females, 2 juvenile (?) females, and 2 adult males released 1 September 2011 (private property along North River, 3.8 miles N, 3.0 miles W Winterset P.O.; T76N, R28W, Sec. 10 NW $\frac{1}{4}$ of SW $\frac{1}{4}$).

Marion County (Seasonal Records): 1 individual released 29 April 2013, 1 postlactating female released 14 July 2018 (private property along Sand Creek, 5.2 miles S, 1.5 miles E Pella P.O.; N41°19'42.1", W92°53'18.5"); and 1 adult male released 22 September 2013 (private property along English Creek, 2.8 miles S, 2.1 miles W Knoxville P.O.; T75N, R20W, Sec. 26 NW $\frac{1}{4}$ of NW $\frac{1}{4}$).

Monroe County (Geographic and Reproductive Record): 1 juvenile male released 9 August 2013 (private property along Miller Creek, 1.6 miles S and 1.0 miles W Eddyville; N41°07.919', W92°39.157').

Palo Alto County (Geographic Record): 1 adult male released 29 June 2016 (Basswood Recreation Area, 1.5 miles N, 1 mile W Emmetsburg P.O.; N43°07'57.8", W94°42'15.9").

Poweshiek County (Geographic Record): 1 adult male released 20 June 2009 (private property, 0.8 miles N, 2.5 miles W Montezuma P.O.; N41°35'59.2", W92°34'15.0").

Perimyotis subflavus (continued)

Tama County (Geographic, Reproductive, and Seasonal Records): 1 lactating female, 1 juvenile female, and 1 adult male released 17 July 2012, 1 postlactating female, 1 juvenile male, and 1 juvenile female released 20 July 2012 (private property along Salt Creek, 2.7 miles S Elberon P.O.; N41°57'59.1", W92°19'02.3"); and 1 adult male released 18 July 2012 (private property, 3.0 miles S, 2.5 miles W Elberon P.O.; N41°57'44.3", W92°21'42.0").

Van Buren County (Geographic, Reproductive, and Seasonal Records): 2 adult females released 19 June 2006 (bridge for Highways 1 & 16 over Lick Creek, 4 miles S Birmingham P.O.; T70N, R9W, sec 31 SW ¼ of NW ¼); 1 lactating female released 22 June 2006 (bridge for County Hwy V64 over Chequest Creek, 4.6 miles S, 0.3 miles W Douds P.O.; T69N, R11W, Sec. 14 south center); 1 adult male released 5 July 2007, and 1 adult male released 28 June 2008 (private property 3.8 miles S, 2.8 miles W Birmingham P.O.; N40°49'21.0", W92°00'09.2"); 2 adult females released 1 July 2008 (private property along Lick Creek, 3.25 miles S, 1.8 miles E Birmingham P.O.; N40°49'52.0", W91°54'42.1"); and 1 adult male and 1 adult female released 15 July 2008 (private property along Lick Creek, 1.8 miles S, 2.1 miles W Birmingham P.O.; N40°51'10.5", W91°59'38.2").

Warren County (Geographic and Reproductive Record): 1 lactating female released 13 July 2008 (private property along North River, 3.2 miles N, 2.2 miles W of Martensdale P.O.; N41°25'12.8" W93°46'53.8").

Museum Records (Geographic Records): **Scott County**, no locality given, collected by John Bowles, 29 May 1993 (SUI 36066); **Wapello County**, 5 miles S Ottumwa, 1 collected by Gene Jennings, 5 October 1968 (KU 169571).