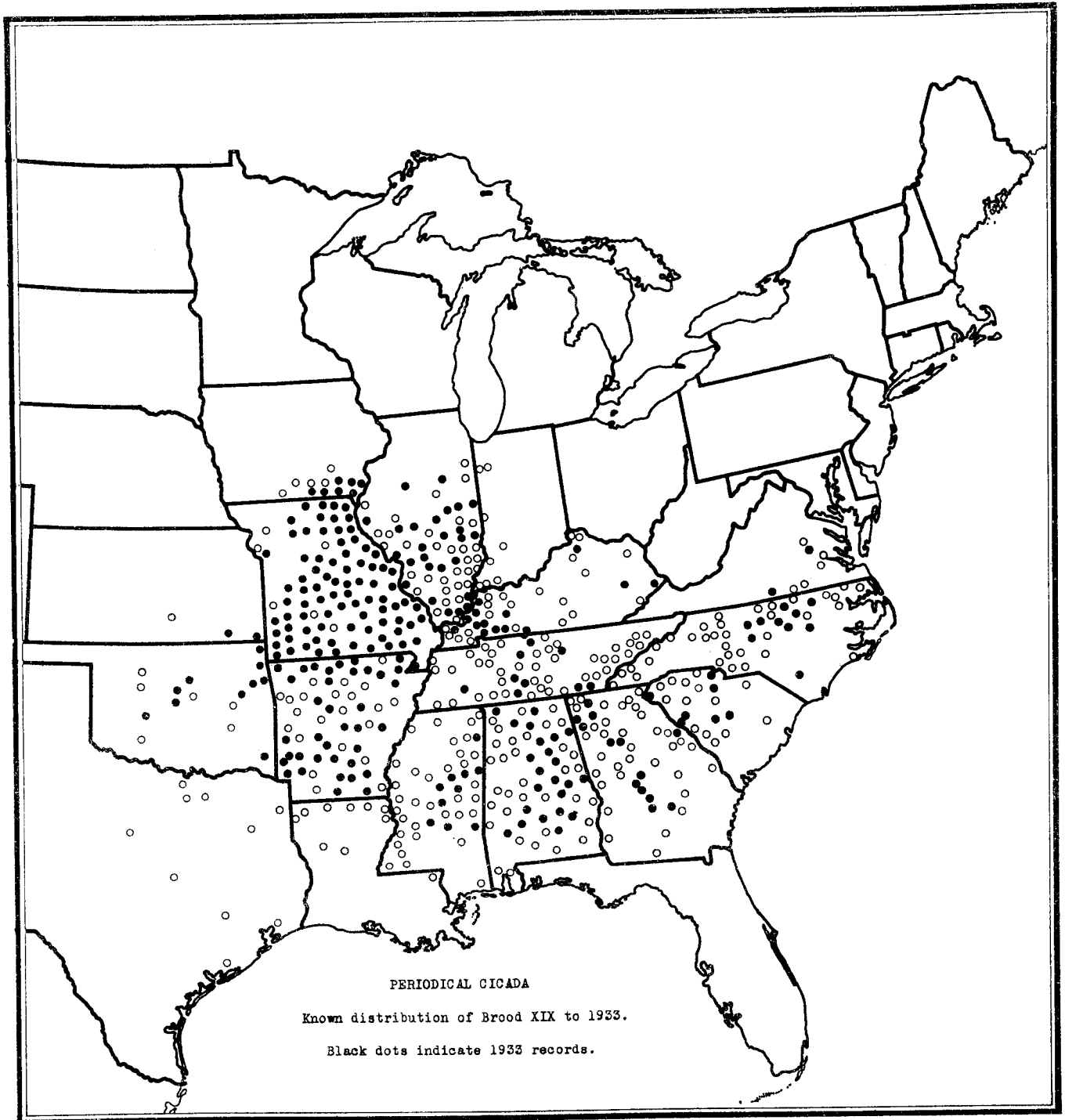


PERIODICAL CICADA

Brood XIX of the periodical cicada (Magicicada septendecim tredecim Riley), the largest of the 13-year broods, appeared in great numbers throughout the greater part of its range. Two records from southeastern Kansas filled in a gap in the western limit of this brood. Three records from eastern Kentucky apparently extended the limits somewhat north of the previously known range. The interpretation of these, however, is confused by the problematical Brood VII of the 17-year race. Brood VII, a small compact brood in the Finger Lakes district of New York, was due to appear this year. There are a few scattered records of a single year's appearance of this brood in western Pennsylvania and southern West Virginia. The Finger Lakes records have been repeated over a period of 136 years, but, strange to say, no records were made this year, although the brood was reported from seven counties in 1916. The insect was reported from two counties in the south-central part of Pennsylvania. No previous records for this brood have been made from this part of the State; and the individuals were probably retarded or accelerated specimens of another brood, as are possibly those of the previous records of this brood beyond the western New York State area. This year brood XIX appeared in the following States and counties:

- Alabama, Blount, Bullock, Chambers, Cherokee, Chilton, Clarke, Coosa, Crenshaw, Dallas, Elmore, Etowah, Jefferson, Lauderdale, Lawrence, Lowndes, Madison, Montgomery, Morgan, St. Clair, Shelby, Talladega, Tallapoosa, Wilcox.
- Arkansas, Ashley, Baxter, Benton, Boone, Bradley, Calhoun, Carroll, Clark, Clay, Cleveland, Conway, Craighead, Crawford, Dallas, Drew, Fulton, Garland, Greene, Hot Spring, Howard, IZard, Jefferson, Lawrence, Little River, Lonoke, Madison, Marion, Pike, Polk, Pope, Pulaski, Searcy, Sevier, Sharp, Union, Washington, White.
- Georgia, Bibb, Chattooga, De Kalb, Floyd, Fulton, Gordon, Houston, Lincoln, Peach, Pulaski, Telfair, Whitfield, Wilcox.
- Illinois, Adams, Bond, Champaign, Clark, Clay, Coles, Cumberland, Gallatin, Hardin, Iroquois, Jackson, Jersey, Johnson, Livingston, Macon, Madison, Marion, Monroe, Montgomery, Morgan, Peoria, Piatt, Pope, Sangamon, Shelby, Vermilion.
- Iowa, Appanoose, Davis, Des Moines, Henry, Jefferson, Lee, Van Buren.
- Kansas, Cherokee, Montgomery.
- Kentucky, Breathitt, Caldwell, Christian, Crittenden, Grant, Livingston, Lyon, McCracken, Muhlenberg, Pike, Simpson, Todd, Trigg, Union.
- Mississippi, Attala, Choctaw, Clarke, Itawamba, Leake, Lowndes, Oktibbeha, Rankin, Smith, Winston.
- Missouri, Adair, Audrain, Barry, Barton, Benton, Bollinger, Boone, Butler, Cole, Callaway, Camden, Cape Girardeau, Carter, Cedar, Christian, Clark, Clay, Cooper, Crawford, Dade, Dallas, Dent, Douglas, Dunklin, Franklin, Gasconade, Greene, Grundy, Henry, Hickory, Howard, Howell, Iron, Jasper, Jefferson, Knox, Laclede, Lawrence, Lewis, Lincoln, Linn, McDonald, Macon, Madison, Maries, Marion, Miller, Moniteau, Monroe, Montgomery, Morgan, Newton, Oregon, Osage, Ozark, Perry, Pettis, Phelps, Pike, Polk, Pulaski, Ralls, Reynolds, Ripley, St. Charles, St. Clair, Ste. Genevieve, St. Francois, St. Louis, Saline, Schuyler, Scotland, Shannon, Shelby, Stoddard, Stone, Sullivan, Taney, Texas, Warren, Washington, Wayne, Livingston, Putnam, Webster.



North Carolina, Alamance, Bladen, Durham, Franklin, Granville, Guilford,
Halifax, Randolph, Wake, Wilkes.
Oklahoma, Adair, Caddo, Cherokee, Delaware, Logan, McCurtain, Muskogee,
Oklahoma, Ottawa, Payne.
South Carolina, Chester, Greenwood, Lexington, McCormick, Oconee, Richland,
York.
Tennessee, Bradley, Chester, Davidson, Giles, Hamilton, Marshall, Maury,
Putnam, Sumner.
Virginia, Halifax, Henrico.

GIPSY MOTH AND BROWN-TAIL MOTH 6

The first egg clusters of the gypsy moth (Porthetria dispar L.) observed hatching in New England were seen on May 3. Dates of first hatch varied somewhat with the locality, the latest being May 19 for one of the northern points. With the exception of some of the northern localities, hatching was general by May 15 and maximum hatch came a few days later. In the Barrier Zone 32 infestations were found with an aggregate of 1,497 egg clusters. Seventeen of these infestations were found in Massachusetts, thirteen in Connecticut, and two in New York. During the year the total number of acres in which there was partial to complete defoliation was 397,000, as compared with 286,000 in 1932. In New Jersey a single scattered infestation of 112 egg clusters was found in an especially rough section about 6 miles northwest of Morristown. Intensive scouting and thorough treatment of egg clusters were followed by spraying in June. All work was performed by the New Jersey Department of Agriculture. In Pennsylvania the area of known infestation was found to cover about 230 square miles. The exact extent was not found, as hatching forced the discontinuance of scouting. This area, centering near Pittston in Luzerne County, embraced parts or all of 15 towns in Lackawanna and Luzerne Counties. Intensive scouting and clean-up work are being continued. During the year, outside the brown-tail moth (Nygmia phaeorrhoea Don.) quarantine line, 20 towns were found infested in Maine, 18 in New Hampshire, and 5 in Vermont. Much of the southern half of New Hampshire, and a corresponding area in Maine, was densely infested and heavy defoliation resulted. Furthermore, the hibernating webs were extremely abundant in this area late in the fall. In Massachusetts the infestation was generally light, but here and there towns were found with areas of heavier infestation.

SATIN MOTH 6

North of the quarantine line, in Maine the towns of Crystal, Houlton, Molunkus, Reed Plantation, Silver Ridge, Staceyville, and Strong, and in New Hampshire the town of Haverhill, were found infested with the satin moth (Stilpnotia salicis L.). Within the infested area, severe defoliation was recorded in Bangor and Brewer, Me.; Alton, Ashland, Campton, Center Harbor, Freedom, and Laconia, N. H.; and in Yarmouth, Mass. Elsewhere in the infested area the defoliation was not severe, though there was noticeable feeding in many towns.

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