



THE INSECT RECORD FOR OKLAHOMA 1935-36

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The more important insect pests. Three species of woolly bear caterpillars were unusually numerous during the spring of 1935. These were the woolly bear *Isia Isabella* Smith and Abbott, the yellow bear caterpillar, *Diacrisia virginica* Fab., and the salt marsh caterpillar *Estigmene acrea* Drury. These caterpillars caused severe injury to cotton seedlings, corn and melon crops. They were observed feeding on ripening peaches and tomato fruits, although they did not apparently feed on tomato foliage. Legumes, beans in particular, were injured by the worms eating the blooms and pods. The salt marsh caterpillar was unusually abundant on white sweet clover. This species comprised about 90 per cent of the population of these caterpillars and was practically wiped out by some disease, possibly bacterial.

The cotton boll weevil, *Anthonomus grandis* Boh., caused some damage in 1935 in the southeastern part of the state, but was of little importance in 1936. In the vicinity of Stillwater it was rare in the fall of 1936.

The cotton flea hopper, *Psallus seriatus* Reuter, was unusually prevalent during 1935, and caused considerable damage to cotton. In 1936 it was scarce.

The cotton leafworm, *Alabama argillacea* Hubner, was unusually destructive in 1935. In 1936, however, while more or less widely scattered throughout the state, it was of small economic importance.

The garden webworm, *Loxostege similalis* Guenee, was unusually abundant in 1936 causing considerable loss to the first cutting of alfalfa. In the southwestern part of the state it destroyed 5,000 acres of cotton, either migrating to this crop from alfalfa or turning to cotton from careless weed.

Grasshoppers were in an outbreak phase over most of the state in 1936. *Melanoplus differentialis* Thos., was by far the most abundant and destructive with *M. mexicanus* Saus., next. *M. bivittatus* Say, was destructive in some sections. *Dissosteira longipennis* Thos., was unusually prevalent in Texas and Cimarron Counties.

The corn bill bug, *Calendra maidis* Chitt., was prevalent in first bottom corn land in Wagoner County in the spring of 1935.

The army worm, *Cirphis unipuncta* Haworth, developed in small grain such as wheat and barley in the spring of 1935, and then migrated to young corn.

The variegated cutworm, *Lycophotia margaritosa saucia* Hubn., occurred in alfalfa in great numbers in 1935 and then migrated to corn causing considerable damage locally.

The army cutworm, *Chorizagrotis auxiliaris* Grote, was abundant locally in Alfalfa County in the spring of 1936. Young alfalfa and oats were completely destroyed.

The two lined cutworm, *Prodenia ornithogalli* Guen., caused severe damage to young cotton, corn and melon plants necessitating extensive replanting in 1935.

A horn worm, *Celerio lineata* Fab., occurred in great numbers in 1935 feeding on grape leaves and young grapes.

The elm leaf aphid, *Tuberculatus ulmifolii* (Monell), was unusually abundant in June 1935 causing heavy shedding of elm leaves, sometimes to the extent of 50 per cent of the foliage. The leaves dropped were still green and in an apparently normal condition with no yellowing or curling evident.

The rusty brown plum aphid, *Hysteroneura setariae* Thos., was unusually abundant in the spring of 1935, reports being received in late May and June.

The flat-headed apple tree borer, *Chrysobothris femorata* Oliv., was unusually destructive to recently transplanted elms, fruit and to young pecan trees. This species was also recorded as a serious pest of rose bushes and even killed large shade trees.

The European fruit scale, *Eulecanium corni* Bouche, has severely injured elms and soft maples throughout the state during both years.

In 1935, the red spider, *Tetranychus telarius* Linne, caused widespread defoliation of elms. It was also commonly found on a wide range of shrubs and ornamental plants.

The walnut caterpillar, *Datana integerrima* Grote and Rob., appeared in large numbers on walnuts and pecans in the late summer and early fall of 1935. Widespread defoliation again occurred on these trees during the mid-summer of 1936. It was expected that the late generation would again defoliate the trees in 1936 but for some reason the insect did not reappear.

In 1935, the sand cricket, *Dalmanella breviceps* (Haldeman), occurred in great numbers in Kingfisher County. Considerable damage to gardens was caused.

In September and October 1936 reports were received of the presence of large numbers of an hemipterous insect, *Jadera haematoloma* (H. and Sch.), infesting Chinaberry trees.

The elm sawfly, *Cimbex americana* Leach, caused defoliation of elms in some sections in 1936.

During the past biennium the insect trap light was operated on favorable nights for collecting June beetles. Records for two years show these beetles to be more numerous in 1935 than in 1936. During this period 10 species were collected of which, *Phyllophaga crassissima* Blanch., was the most abundant. Large numbers of *P. calceata* LeConte, *P. bipartita* Horn, and *P. hirtiventris* Horn, were also taken. To date 26 species have been taken in Oklahoma as follows:

<i>P. affabilis</i> Horn	<i>P. hirtiventris</i> Horn
<i>P. arkansana</i> Schffr.	<i>P. hornii</i> Smith
<i>P. bipartita</i> Horn	<i>P. ilicis</i> (Knoch)
<i>P. calceata</i> Lec.	<i>P. inepta</i> Horn
<i>P. congrua</i> Lec.	<i>P. lanceolata</i> (Say)
<i>P. crassissima</i> (Blanch.)	<i>P. longitarsa</i> (Say)
<i>P. crenulata</i> (Froel.)	<i>P. micans</i> (Knoch)
<i>P. ephillida</i> (Say)	<i>P. praetermissa</i> Horn
<i>P. fervida</i> (Fab.)	<i>P. profunda</i> (Blanch.)
<i>P. forbesi</i> Glas.	<i>P. prunina</i> Lec.
<i>P. fraternata</i> (Brum.)	<i>P. quercus</i> (Knoch)
<i>P. glabricula</i> Lec.	<i>P. rubiginosa</i> Lec.
<i>P. gracilis</i> var <i>angulata</i> (Glas.)	<i>P. submucida</i> Lec.

The primary screw worm fly, *Cochlyomyia americana* C. and P., spread to practically all parts of the state in 1935. Cases of myiasis were exceptionally numerous in Comanche County in July and in Stephens, Jefferson, Carter and Love Counties in August. No records are available as to the number of cases reported in the state, but ranchmen generally agreed that losses were the most severe in at least 20 years. In 1936, however, the other extreme was reached. That year careful records were taken and from June 20-November 6, 869 cases were recorded, mostly from the southern part of the state. The first case recorded in 1936 was during the week ending June 26.

In 1935, species of Diptera collected in fly traps were pinned and have been identified by Messrs. Hall and Green of the U. S. Bureau of Entomology and Plant Quarantine as follows:

<i>Phormia regina</i> Mg.	<i>Sarcophaga stimulans</i> Wk.
<i>Sarcophaga rapax</i> Walk.	<i>Sarcophaga laakei</i> Hall
<i>Sarcophaga plinthopyga</i> Wd.	<i>Muscina stabulans</i> Fall
<i>Sarcophaga sarracentoides</i> Ald.	<i>Cochliomyia macellaria</i> F.
<i>Sarcophaga sueta</i> V. d. W.	<i>Cynomyia cadaverina</i> R. D.
<i>Sarcophaga bullata</i> Pk.	<i>Fannia canicularis</i> L.
<i>Sarcophaga therminterti</i> R. D.	<i>Euclytia flava</i> Tns.
<i>Sarcophaga cimbicis</i> Ins.	<i>Chrysomya demandata</i> Fab.
<i>Sarcophaga tenuiventris</i> V. d. W.	<i>Syrphidia pipiens</i> L.
	<i>Delphinia picta</i> Fab.

Other species of animal parasites received were the stick tight flea, *Echidnophaga gallinacea* (Westwood) on poultry, the fluff louse *Gonlocotes hologaster* Nitzsch, on poultry, and the spinose ear tick, *Otobius megnini* (Duges).