

Entomology and Plant Pathology, Oklahoma State University 127 Noble Research Center, Stillwater, OK 74078 405.744.5527

Vol. 16, No. 34

http://entoplp.okstate.edu/pddl/pdidl

10/2/2017

Shorttailed Crickets: A Minor Nuisance Pest of Turfgrass

Eric J. Rebek, State Extension Specialist for Horticultural Insects

The recent warm, wet weather this fall has resulted in large numbers of shorttailed crickets, *Anurogryllus arboreus*, emerging in turfgrass throughout Oklahoma. The arrival of these minor nuisance pests is heralded by strange, pelleted mounds appearing in home lawns, sports fields, and other recreation areas (Figure 1). These structures resemble crayfish tubes or earthworm castings, yet they are entrances to the burrows of shorttailed crickets. Mounds may be unsightly, but these peculiar creatures are considered minor pests of turfgrass since their nocturnal feeding damage to grass blades is negligible.





Figure 1. Mounds created by shorttailed crickets in Oklahoma lawns and other landscapes. Photos by Eric Rebek, Oklahoma State University.

Description

These crickets are similar to field crickets except for the short ovipositor (i.e., egg-laying organ found on females), which gives rise to their common name. Adults are brown and measure about 1/2 to 3/4 inch long (Figure 2). They shed their hindwings soon after becoming adults, and thus are non-flying. The light brown nymphs are smaller than adults and lack wings.

Life Cycle

Shorttailed crickets overwinter as nearly mature nymphs in burrows belowground. Upon developing through several molts in early spring, they reach the adult stage. Mated females begin to lay eggs in late spring or early summer. Hatching takes place in multi-chambered burrow constructed by the adult. For a short period of time, both eggs and nymphs may be found in the burrow. Between the fourth and sixth instars (i.e., juvenile development stages), nymphs leave the parent burrows and construct burrows of their own. At



Figure 2. Adult shorttailed cricket. Photo by Rick Grantham, Oklahoma State University.

first the burrows are small, but as the crickets mature the burrows are enlarged and may reach depths of 12 to 20 inches. Only one cricket is found per burrow except when parent burrows contain eggs and nymphs. There is one generation per year.

Hosts

Shorttailed crickets feed on grasses, weeds, pine cones, and pine seedlings. They are seldom seen because they forage at night. As mentioned above, they cause very little damage to turfgrass.

Damage

Burrows are constructed by nymphs and adults, resulting in unsightly mounds of small soil pellets, which may smother the surrounding grass. In Oklahoma, they are seldom noticed until the maturing nymphs begin to construct new burrows. This is usually sometime in August and continues through October, although shorttailed crickets also become active in spring as they emerge from hibernation. Burrows may be rebuilt each time they are washed away by rains.

Inspection and Control

Look for mounds of small soil pellets or soil deposits similar to those constructed by crayfish or earthworms. Treatment provides only partial control and is seldom needed unless large numbers of mounds are encountered. If treatment is attempted, an insecticide that is registered for late summer or fall control of white grubs and other soil insects will reduce numbers of shorttailed crickets (see OCES publications E-832 or CR-7195). Also, a simple, non-chemical method of management is to knock down mounds with a rake or other tool.

References Vittum, P.J., M.G. Villani, and H. Tashiro. 1999. Turfgrass Insects of the United States and Canada, 2nd Edition. Cornell University Press.

Co-Editors: Eric Rebek and Justin Talley; Oklahoma Cooperative Extension Service

The pesticide information presented in this publication was current with federal and state regulations at the time of printing. The user is responsible for determining that the intended use is consistent with the label of the product being used. Use pesticides safely. Read and follow label directions. The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Cooperative Extension Service is implied.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, and Title IX of the Education Amendments of 1972 (Higher Education Act), the Americans with Disabilities Act of 1990, and other federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, genetic information, sex, age, sexual orientation, gender identity, religion, disability, or status as a veteran, in any of its policies, practices or procedures. This provision includes, but is not limited to admissions, employment, financial aid, and educational services. The Director of Equal Opportunity, 408 Whitehurst, OSU, Stillwater, OK 74078-1035; Phone 405-744-5371; email: eeo@okstate.edu has been designated to handle inquiries regarding non-discrimination policies: Director of Equal Opportunity. Any person (student, faculty, or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX Coordinator 405-744-9154.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is issued by Oklahoma State University as authorized by the Vice President, Dean, and Director of the Division of Agricultural Sciences and Natural Resources.