

# Sand Field Cricket, *Gryllus firmus* Scudder (Insecta: Orthoptera: Gryllidae)<sup>1</sup>

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## Introduction

The sand field cricket, *Gryllus firmus*, is the common chirping field cricket of lawns, pastures, and roadsides throughout Florida.

[Overview of Florida field crickets](#)

## Distribution

Sand field crickets occur throughout the southeastern United States. To the north and west the species is replaced by the fall field cricket (*Gryllus pennsylvanicus*). In areas of contact the two hybridize to a minor extent.

## Identification

The sand field cricket, which chirps, often occurs intermixed with either the [southeastern field cricket](#) or the [Texas field cricket](#), both of which are trilling species. These differences in song are stark ([song comparisons](#)) as are the differences in the numbers of teeth and spacing of the teeth in the [stridulatory files](#) used to make the songs. The only readily accessible morphological difference between the sand field cricket and the two trilling species is the [color pattern on the forewings](#).

In southern Florida, where sand and [Jamaican field crickets](#) co-occur, the [color pattern of the head](#) will separate the two.

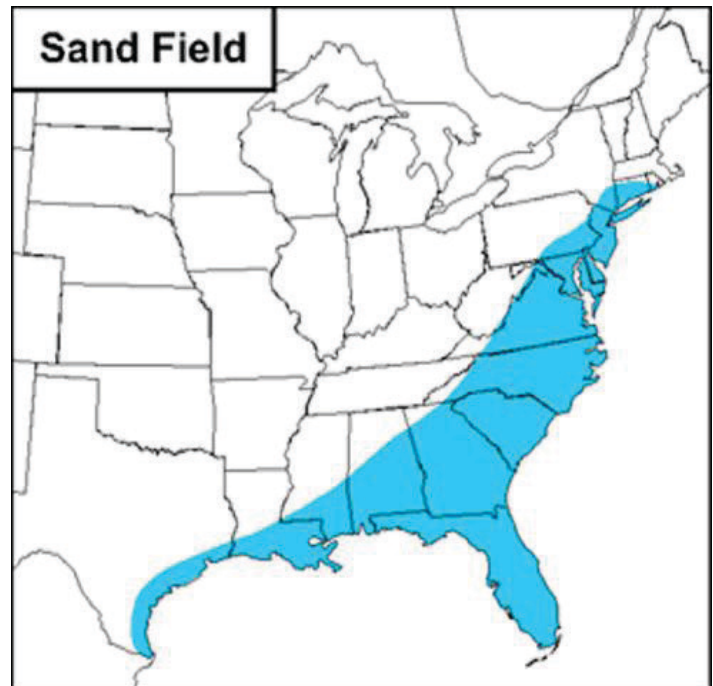


Figure 1. Distribution of sand field cricket in the United States.

## Life Cycle

Sand field crickets have the most variable life cycle known for field crickets. During much of the year females lay some eggs that hatch within a few weeks at room temperatures and other eggs that take a month or two to hatch under the same conditions. Furthermore, if potentially quick-hatching eggs are exposed to cool temperatures, some lose that

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potential. Nymphal development is also variable with some developing quickly and some much more slowly, even when exposed to the same conditions. The effect of all this is that a female's progeny may mature over a 10-month period, with slow developers maturing at the same time as some of the progeny of their faster-developing sibs. In spite of the variability, there are peaks of adults in late spring (mostly from over-wintering eggs) and in fall (mostly from fast-developing progeny of spring adults).



Figure 2. Sand field cricket, *Gryllus firmus* (Scudder), short-winged male.

Credits: Paul M. Choate, UF/IFAS



Figure 3. Sand field cricket, *Gryllus firmus* (Scudder), short-winged female.

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## Habitat

This species is characteristic of lawns, pastures, and roadsides, especially those that are well drained and sandy.

## Song

The **calling song** (689 Kb wav file) is a series of slow-pulsed chirps, with a chirp rate of about two per second. Most

chirps have four pulses, with the initial one being much weaker than the rest ([graphs](#)).

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