# Common Nuisance Invaders of Homes in Colorado

**Whitney Cranshaw**

**Colorado State University**

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- The insect does not reproduce within the building
- The problem is that it is a bug in a building, period

# Nuisance Invaders Issues Vary with the Season

# Spring time brings:

- Wake up of overwintered insects in homes
- Ants foraging indoors until soils warm
- Clover mites
- Army cutworm migrations
- Millipede migrations
- Swallow bugs



# The Big 3 Winter Time Residents of Colorado Homes

**Arthropods found in homes in spring often result from seasonal migrations**

# Clover Mites

# Clover mite activity – Late February through Late April

**Clover mites often accidentally enter buildings during warm days in late winter and early spring**

**Clover mite activity is concentrated around buildings, trees, shrubs and other aboveground objects**

# CLOVER MITE POPULATIONS 1990

## SITE 2

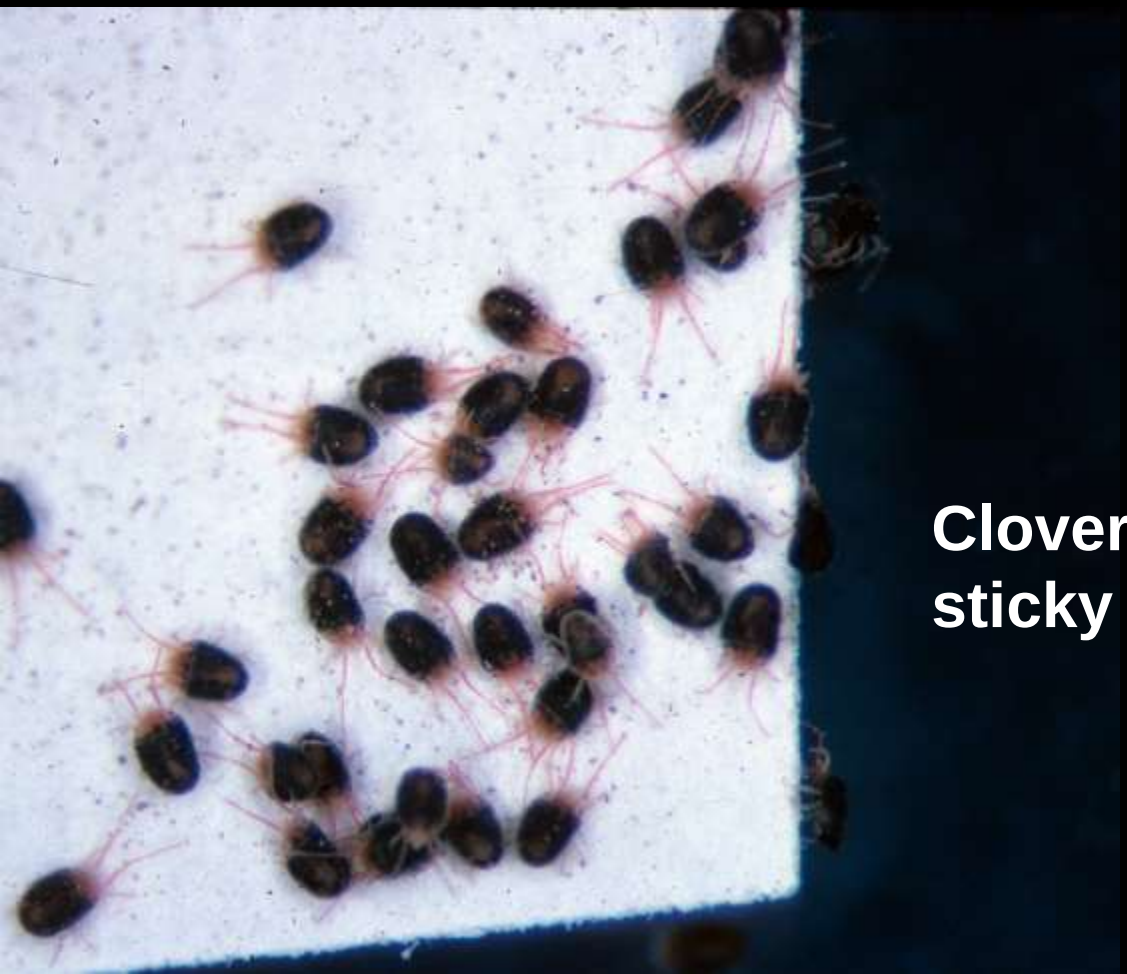
**Buildings serve as surfaces on which they may molt and lay eggs. Entry into living areas in incidental.**

# Turf – Water = Mites in spring

# Clover Mite Control Products?
## (Post Organophosphate Period)

- Bifenthrin
- Lambda-cyhalothrin
- Extra Irrigation

**Powdery materials (baby powder, corn starch, diatomaceous earth, etc.) can provide an impenetrable barrier to clover mites coming into homes around windows and other points of entry**



**Clover mites trapped on a sticky note**

# Field Ants

*Formica* spp.

# Field ants – a.k.a. “thatcher ants”

Nests may be in the form of small mounds incorporating small twigs and other plant matter

Field ants collecting aphid honeydew

Field ants collecting sugary secretion from peony buds

# Harbingers of Spring

**Robin (left); Field ants temporarily forage in homes (below)**

**April showers bring**

**.... millipede migrations**

# Millipedes dry out and die within a few days after entering homes

# Millipede Migrations

- **Originate in lawn, mulched beds**
  - ***Feed on decomposing plant matter***
- **Persisting period of wet weather in spring or fall triggers migrations**
  - ***Survival indoors usually only a day***

# Army cutworm

***Euxoa auxiliaris***

The predominant cutworm of the High Plains/Rocky Mountain region

…..and the common “Miller Moth” of the west

**Army cutworm feeding in a winter wheat field. Primary feeding occurs on broadleaf weeds.**

# Army cutworm pupa

**Pupae are present from March through late May**

# Adult form of the army cutworm – the Colorado ’Miller Moth’

# Army cutworm moths have variable wing patterning

# Miller Moth

**Term applied to *any species of moth that is locally abundant***

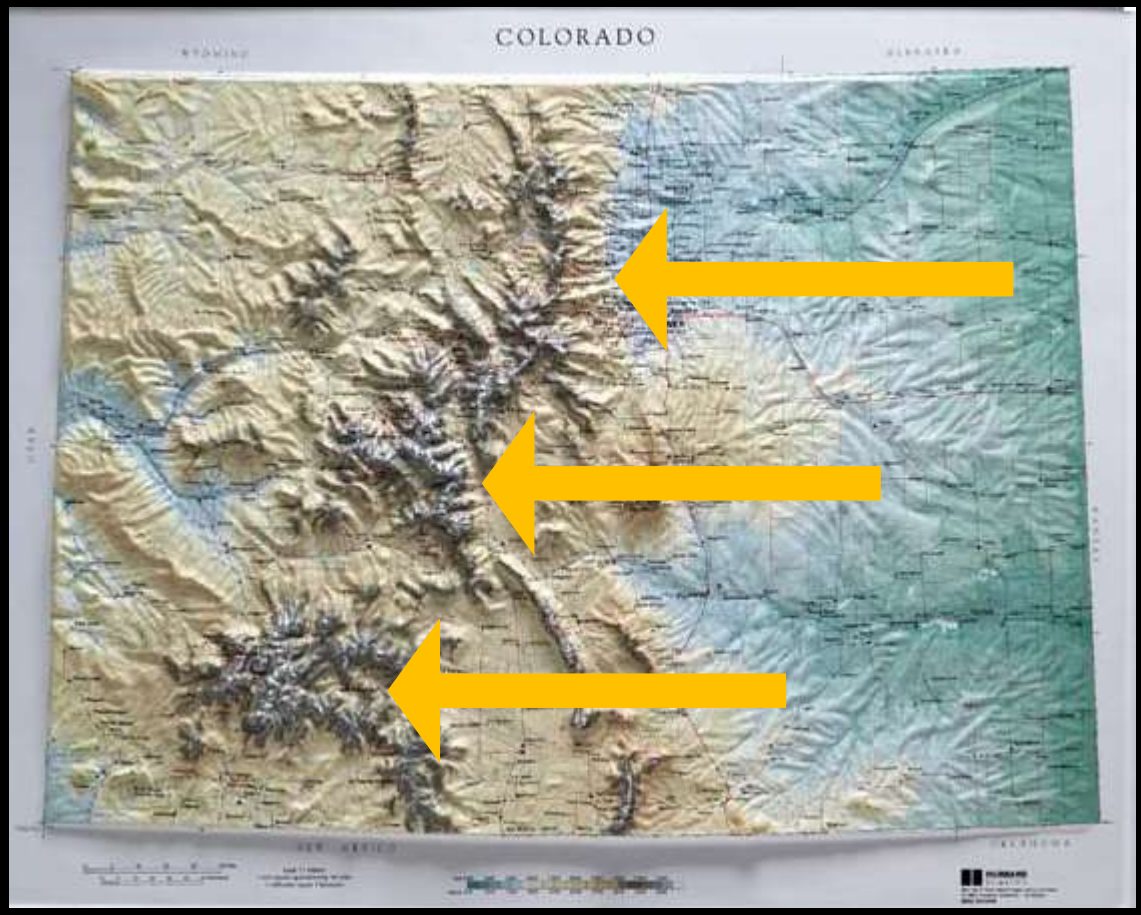
**Term refers to the scales on moth wings that dislodge – like flour on the smock of a miller**

# Next Task….

*Follow the flowers and stay cool*

# The Annual Migration

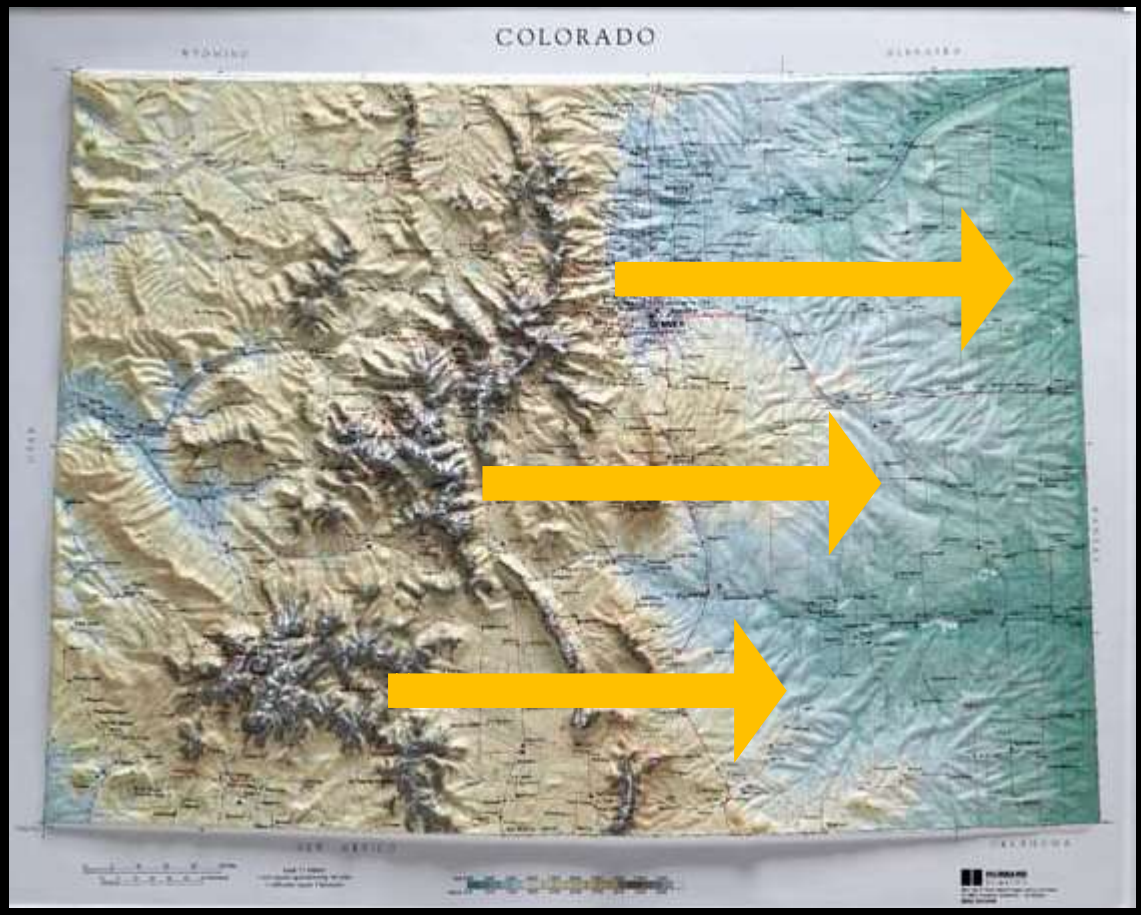
Move from the Plains to the mountains in May-June



# The Annual Migration

Move from the Plains to the mountains in May-June

Return to the Plains in September and early October



**Swallows at the intersections?**

***Its Miller Time!***

During the daytime, army cutworm moths hide in cracks, crevices and other protected sites

# Plants Commonly Used as Miller Moth Nectar Sources

- Lilac, Chokecherry and other *Prunus*
- Spirea
- Euonymus
- Cotoneaster
- Russian olive

# Plants Commonly Used as Miller Daytime Shelter Areas

- Densely growing pines
- Spruce
- Dense evergreen deciduous shrubs (e.g., cotoneaster)

# Summer Time Brings…..

- Duff millipedes
- Springtails
- Windscorpions/Sunspiders
- False chinch bugs
- Root weevils
- Earwigs

# April showers bring – millipede migrations

## Summer heat brings…
# duff millipedes

Duff millipede

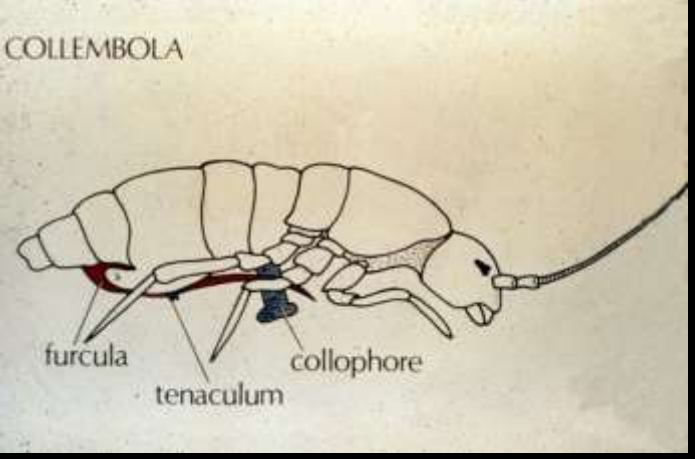
**Duff millipedes are often mistaken for dermestid (carpet) beetle larvae**

Dermestid beetle larva and adult

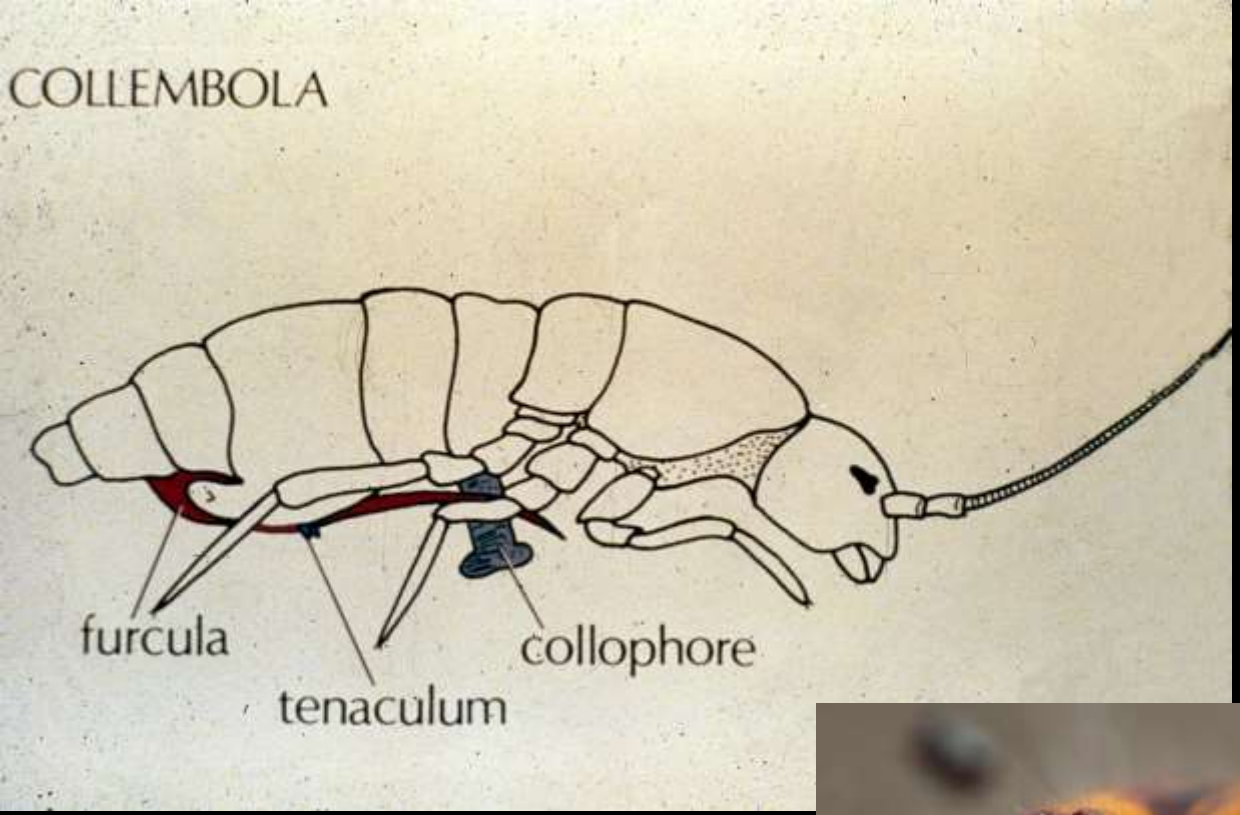
# Duff Millipede Problems in Homes

- Are most frequent in foothills areas and associated pine forest
- Tend to intensify during hot, dry periods in summer

# Springtails




**Extremely common "bugs" that may wander into buildings**




# Springtails

# Springtails and Nuisance Household Invasions

**Associated with hot, dry weather that follows an extended wet period**



# Root Weevils (*Otiorhynchus* spp.)


# Larvae of root weevils feed on roots


**Adults root weevils produce leaf notching wounds**




**Three species of root weevils commonly enter buildings in summer and early autumn**

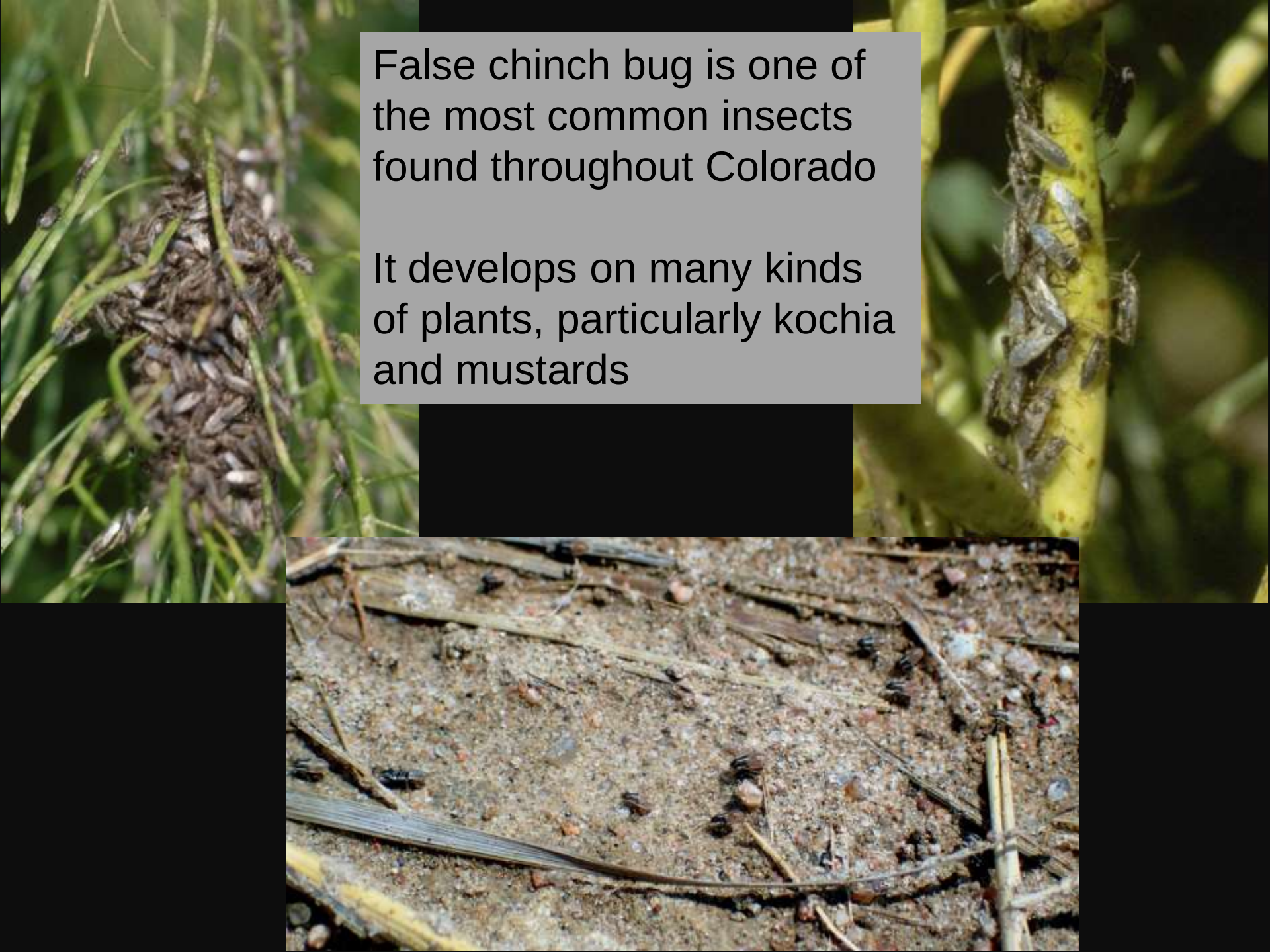

Strawberry root weevil is the most common species reported in homes

Peak periods of building invasion often occurs during periods of high temperatures in summer


**Several seed-feeding bugs incidentally enter buildings**

# False chinch bug

*Nysius raphanus*



False chinch bug is one of the most common insects found throughout Colorado

It develops on many kinds of plants, particularly kochia and mustards

In 2018 some areas saw huge populations and mass migrations of this insect

**Peak indoor migrations coincide with periods when host plants dry down/mature. But false chinch bug complaints were received from June through September**

# Summer Time Brings…..

- Duff millipedes
- Springtails
- Sunspiders
- False chinch bugs
- Root weevils
- Earwigs

## …..and now elm seed bugs!

New State Record (2017)

# Elm Seed Bug

*Arcocatus melanocephalus*

A significant new nuisance invader of homes in summer

Adult

Nymph

Photo by Ryan Davis

Photo by Ryan Davis, Utah State University

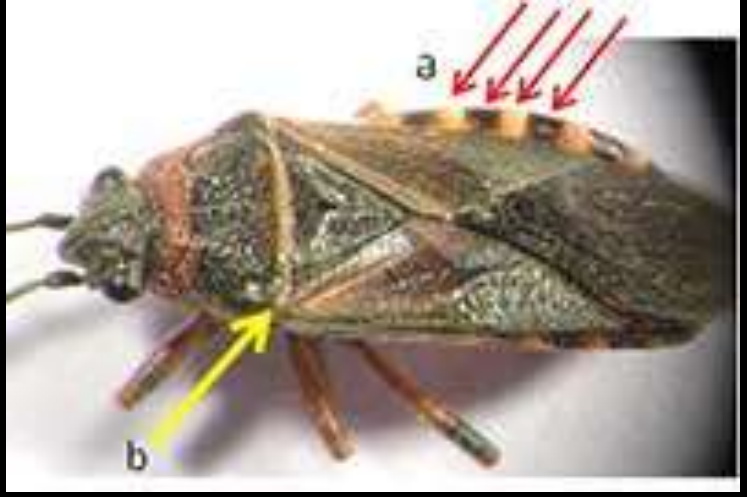
Fecal spotting

Develops on seeds of elm

No harm to trees

Moves into buildings in summer, early autumn

Nuisance issues, some associated odor




# There is a new Extension Fact Sheet on this insect

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## Elm Seed Bug: A New Nuisance Pest in Colorado Homes

Fact Sheet No.5.619 | Insect Series | Home & Garden

M.Shrader

The elm seed bug (*Arocatus melanocephalus*) is a pest native to Europe and the Mediterranean region and was first detected in 2012 in Idaho. Since then it has been detected in Utah, Oregon, Washington, British Columbia, and, most recently, in Colorado. The first detections of this insect were made in July 2017, and it is presently known in Mesa, Delta and Montrose counties. With the widespread presence of its host plant, Siberian elm, this insect will likely spread through much of Colorado.

ber and may become active in homes during the winter if temperatures are favorable outside. Adults will overwinter in structures, but do not reproduce in the home. When spring arrives they will venture out from overwintering sites to feed on developing elm seeds. The elm seed bugs are a further nuisance because they can produce a pungent odor similar to bitter almonds from abdominal scent glands.

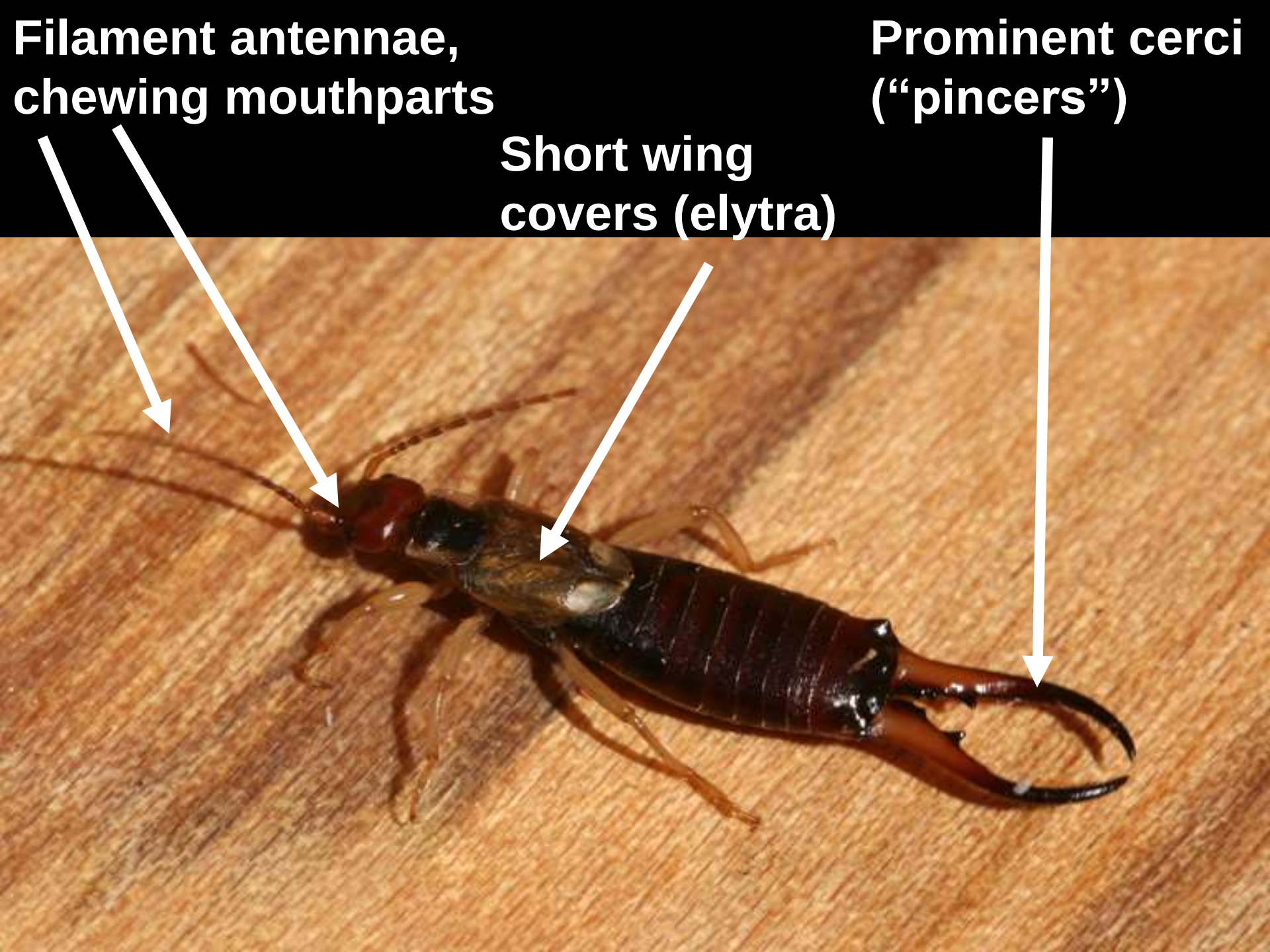
The adult bugs are the stage normally present in a home. These are about 1/3

### Quick Facts

- The elm seed bug is an insect that has newly arrived in Colorado that feeds on the seeds of Siberian elm.
- Elm seed bug cause nuisance problems by moving into buildings in summer and early autumn. They do not reproduce indoors.
- The best management of elm seed bugs is to seal cracks

# European earwig

## Colorado’s only earwig species


Filament antennae,
chewing mouthparts
Short wing
covers (elytra)
Prominent cerci
("pincers")

European earwig displaying wings

**The cerci (aka ‘forceps’), are fairly weakly muscled. They are used during mating (by males) and can help to manipulate prey.**

European earwig - male

European earwig - female

The first mass of eggs is laid in late winter. Eggs are laid in small cavities in mulch, under rocks or other protected places.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# Earwigs are *omnivores*

**Small soft-bodied insects and insect eggs make up an important part of their diet.**

# Earwigs feed at night

**Flower petals and soft plant parts are also eaten by earwigs.**

**Earwigs feed at night.**

# Thigmotaxis – “a predilection for pressure”

# Earwigs – Increasing as garden problems?

# Possible reasons for increased incidence of earwigs

- Weather-related issues
- Increased use of mulches that provide favorable habitat

# Mulches and Nuisance Invaders

- European earwig
- Springtails
- Millipedes
- Sowbugs/Pillbugs
- Field crickets
- Some spiders

# Sowbugs and Pillbugs

Sowbug

Pillbug – also known as the ‘roly-poly’

**Associated with moist areas and decaying vegetation**

The Wood Louse Hunter/ Roly-Poly Killer

Family Dysderidae

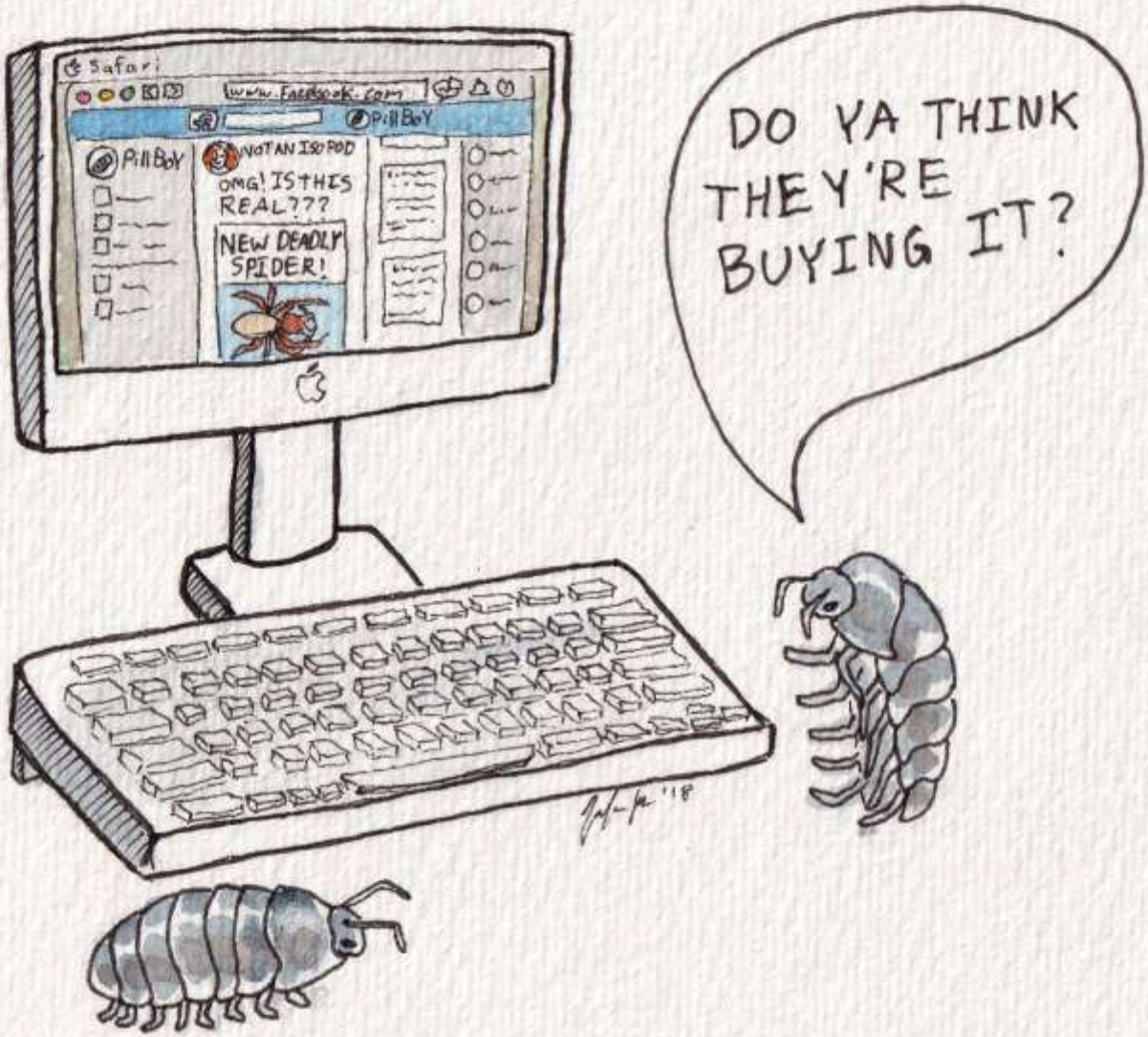
*~Dysdera crocata*

# NEW DEADLY SPIDER SPREADS ACROSS USA

August 21

THE SPIDER FROM HELL .FIVE PEOPLE HAVE DIED THIS WEEK DUE TO THE BITE OF THIS DEADLY SPIDER .THIS SPIDER WAS FIRST SEEN IN SOUTH CAROLINA IN JULY SINCE THEN IT HAS CAUSED DEATHS IN WEST VIRGINIA ,TENNESSEE AND MISSISSIPPI. ONE BITE FROM THIS SPIDER IS DEADLY. US GOVERNMENT WORKING ON A ANTI VENOM AT THIS TIME PLEASE MAKE YOUR FAMILY AND FRIENDS AWARE


University of Nebraska
Department of Entomology


Safari
www.facebook.com
PillBoy
PillBoy
NOT AN ISOPOD
OMG! IS THIS REAL???
NEW DEADLY SPIDER!
DO YA THINK THEY'RE BUYING IT?

@jennrosefx

# Sunspider (aka Windscorpion, Solpugid)

Colorado State University
EXTENSION

# Windscorpions (Sunspiders) of Colorado

Fact Sheet No. 5.589

Insect Series | Home and Garden

by W.S. Cranshaw[1], Paula Cushing[2], and Jack Brookhart[2]

Windscorpions are animals of bizarre appearance that can be found in most of the drier areas of Colorado below 7500 feet. These are a type of arachnid, categorized in the order Solifugae, and are distant relatives of "true" scorpions (order Scorpiones) and spiders (order Araneae). Other common names given to windscorpions include "sunspiders," "solpugids," "solifuges," and, "camel spiders." Presently 15 species are known to occur in Colorado (Table 1).

**Figure 1:** A windscorpion, also known as a "sunspider" or "solpugid"

## Quick Facts

- Windscorpions are a type of arachnid native to many of the drier areas of Colorado below 7500 feet. Fifteen species are known to be present in the state.
- Other common names for windscorpions include "sunspiders", "solifuges",

# Summer Lighting and Some Indoor Pest Events

**Indoor migrations usually occur in midsummer. Outdoor lighting, attractive to prey, is associated with incidental indoor movements.**

**Some Ground Beetles are attracted to Summertime lights**

# What is a “stink bug”?

# What is a “stink bug”?



# “Skunk”/ “Stink”/ “Circus” beetles

*Eleodes* species

Left: “True” Stink Bug

Below: NOT A Stink Bug

A Stinky Beetle

Right: Darkling Beetle (aka ‘stink beetle’, ‘circus beetle’)

# Stink Bugs

Hemiptera: Pentatomidae

## *Chlorochroa* species of stink bugs are commonly seen massing on buildings in summer

***Chlorochroa sayi* – Say stink bug**

***Chlorochroa ligata* – "conchuela"**

**Rough stink bugs are native insects sometimes found within homes**

# Brown Marmorated Stink Bug

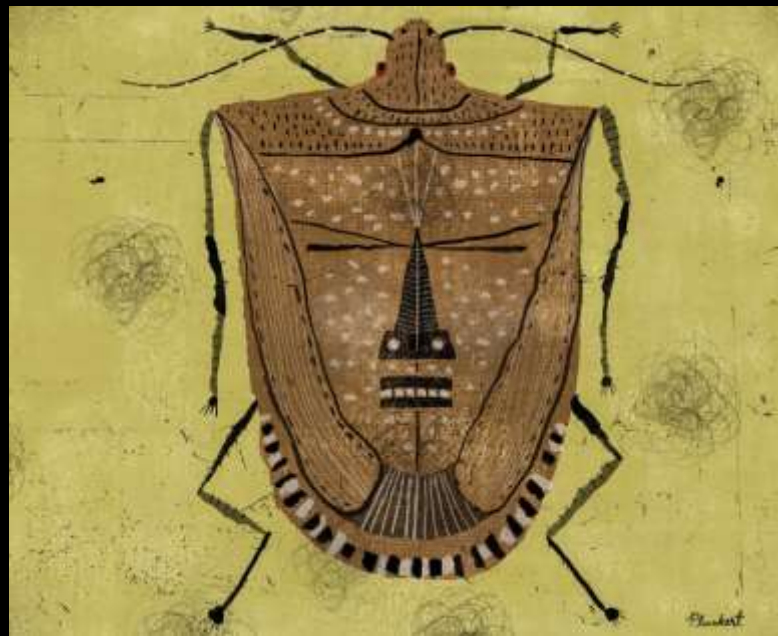

**Brown marmorated stink bug is a common invader of buildings in fall in parts of the US. Upper stories on sun exposed sides are primary concentrations**

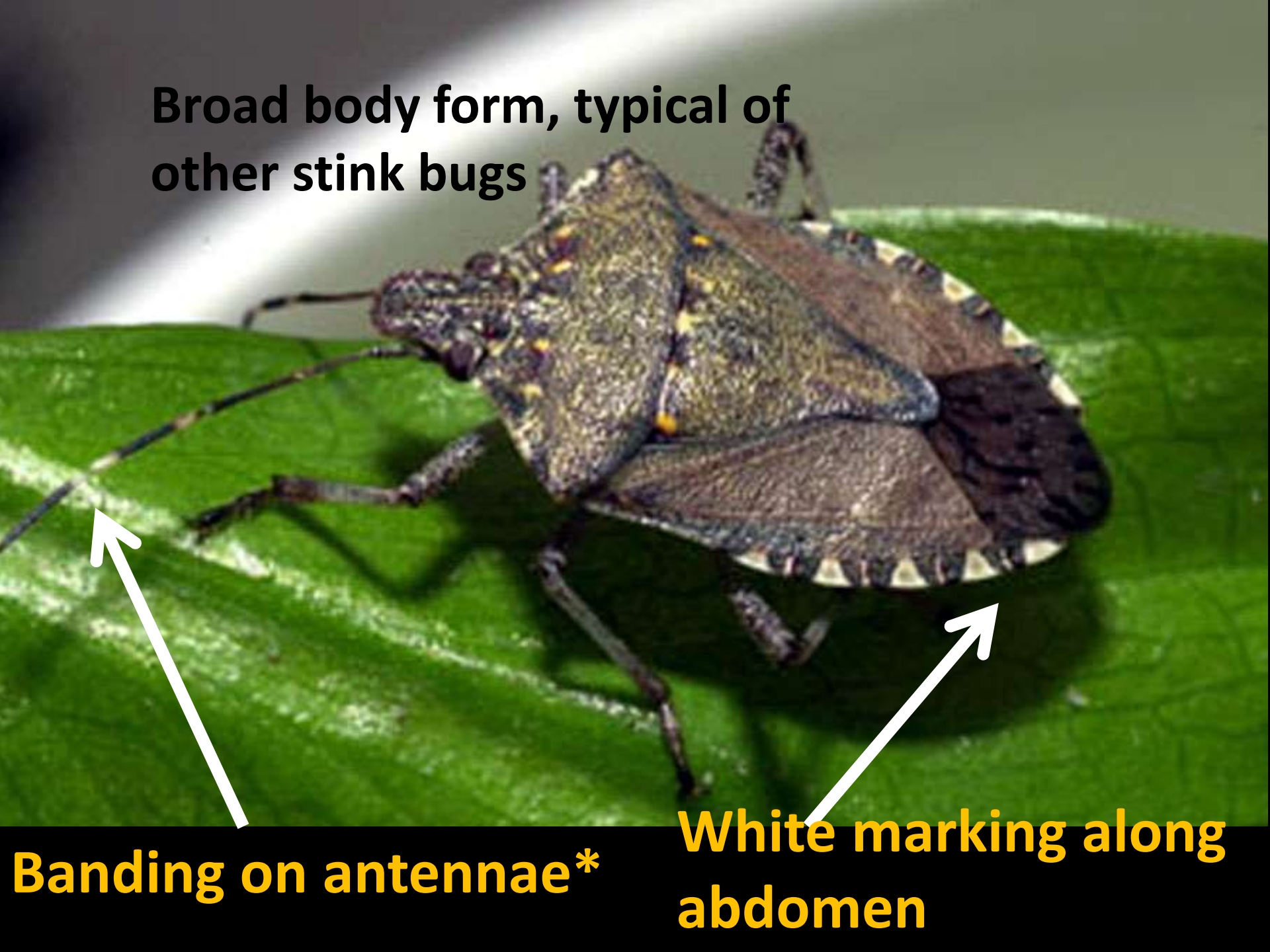
ANNALS OF ECOLOGY MARCH 12, 2018 ISSUE

# WHEN TWENTY-SIX THOUSAND STINKBUGS INVADE YOUR HOME

*These uniquely versatile bugs are decimating crops and infiltrating houses all across the country. Will we ever be able to get rid of them?*

**By Kathryn Schulz**




Broad body form, typical of other stink bugs
Banding on antennae*
White marking along abdomen

Western conifer-seed bug is a very common nuisance invader of homes in Colorado

Stink bug

# Late Summer/Early Fall Migrations

- Western conifer-seed bugs
- Boxelder bugs
- Elm leaf beetles
- Funnel weaver spiders
- Cluster flies


# Some Winter Residents of Colorado Homes

# Boxelder Bug

**Boxelder bugs are associated with boxelder maple**

**Boxelder bugs move to winter shelter. Warmed, rough surfaces are common points of mass aggregation in late summer/early fall.**

SAN JUAN MOUNTAINS

# Insects crash computers

OURAY — Bugs brought down Ouray County's computer system over the Thanksgiving holidays, but the bugs weren't of the computer-glitch variety. They were bona fide insects.

The bugs — the black-and-orange, antenna-waving box elder variety — were found inside a new computer server by computer technicians. The technicians were called in by county workers who returned from Thanksgiving vacation to find their computers inoperable. The county's next call for help went to an exterminator.

The bugs, which were apparently attracted by the server's heat, knocked out computers in the treasurer's, clerk and assessor's office and held up payroll checks for county employees.

**Colorado's Y2K Bug?**

**Western conifer seed bug, *Leptoglossus occidentalis***

# Blood-sucking Conenose, *Triatoma* spp.

*Leptoglossus clypealis*
**Western leaffooted bug**

**May mass on homes in summer**

**Nuisance invader in autumn**

*Leptoglossus occidentalis*
**Western conifer-seed bug**

*Leptoglossus clypealis*

**A close relative of the western conifer-seed bug that sometimes clusters on buildings**

**Photograph taken by Richard Nobman in Dolores County**

## Most Common Spiders in Homes

# Funnel weaver Spiders

## Family Agelenidae, three common genera

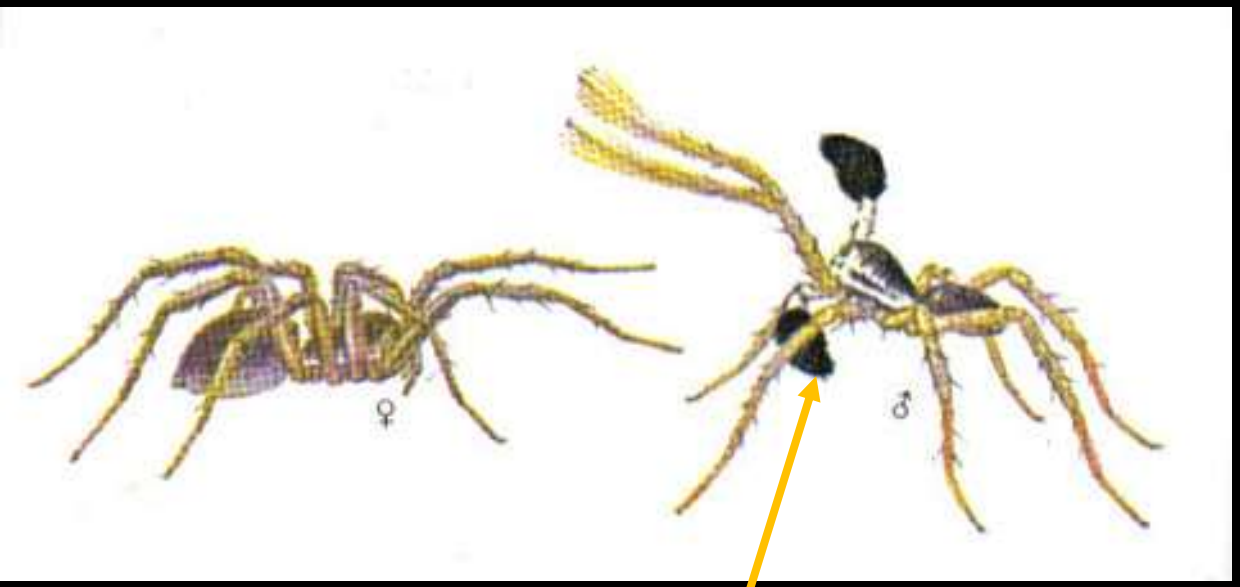
Funnel-weaver Spiders

Family Agelenidae

# Funnel weaver webs

Male funnel weaver spiders have grossly enlarged pedipalps (*not fangs!!*)

# Spider Mating – Transfer of Sperm Via Pedipalps




Pedipalps

Most funnel weavers found in homes are incidental transients, wandering indoors in late summer/early fall

*Agelenopsis* species

*Hololena* species

# Some funnel weaver spiders can reproduce indoors

*Tegenaria domestica*

Barn funnel weaver/domestic house spider

*Tegenaria agrestis*

Hobo spider

Jumping Spiders

Family Salticidae

Jumping spiders have the best visual acuity of any terrestrial arthropod

# Common jumping spiders found within homes

# Multicolored Asian lady beetle, *Harmonia axyridis*

# Household invasions – Multicolored Asian lady beetle

Common in many areas of the US.  Low incidence in Colorado

**Green lacewings as a nuisance invader in fall.**

**Primarily occurs in forested areas. The species involved usually is *Chrysoperla nigricornis***

# Winter Time Flies in Homes

**Cluster flies, bluebottle flies, picture-winged flies and others**


***Ceroxys latiusculus*, a picture-wing fly that commonly enters buildings in Fall**

# Cluster Flies

***Pollenia* species**

**Cluster flies are characterized by having golden, curled hairs on the thorax**

# Scenario for Cluster Fly Invasion of a Building

- Flies move to sunlit vertical surfaces when seeking winter shelter
- Flies move upward as sun sets
- Flies enter upper areas of building
- Flies often cluster together behind walls during cool season

# Cluster Flies

## A Colorado mystery

**“The” cluster fly, *Pollenia rudis*, is a parasitoid of certain earthworms**

# Questions involved with Colorado Cluster Flies

- No earthworms are native to Colorado, although many have been introduced
- Cluster flies problems are most severe at higher elevation counties
- What kinds of “cluster flies” occur here and what do they do?

# *Pollenia pediculata*

**Four species of cluster flies have been recovered from Colorado buildings. *Pollenia pediculata* is most abundant**

# There is a new fact sheet on this subject

COLORADO STATE UNIVERSITY
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## Cluster Flies and other "Winter Flies"

Fact Sheet No. **No. 5.618** Insect Series | **Home & Garden**

W. Cranshaw[1]

During the cool months some insects have the habit of moving into buildings as a temporary winter shelter. Common examples of such cool season "nuisance invaders" are boxelder bugs, western conifer-seed bug, and elm leaf beetles. Cluster flies (Pollenia species) are the most common of the flies that often use buildings as a temporary shelter through winter.

Cluster flies tend to be particularly common in higher elevation communities, but

There are some other kinds of flies that will be found indoors and these are reviewed in Fact Sheet 5.502 Flies in the Home. Among these are some other "winter flies" that use homes for winter shelter, particularly the "blue bottle flies" (*Calliphora* species) and the black blow fly (*Phormia regina*). The habits of these differ in some important ways from those of cluster flies and are discussed below.

### Quick Facts

- Cluster flies frequently use buildings for winter shelter and can be the most common fly found indoors during the cool season.
- Cluster flies develop by feeding on earthworms.
- Cluster flies found in buildings are in a dormant state and

# General Principles for Managing Nuisance Household Invaders

Seal openings of home prior to time when insects enter the building

- Barrier insecticide applications can supplement
- Dusts are sometimes blown behind walls

Treat/remove host plants

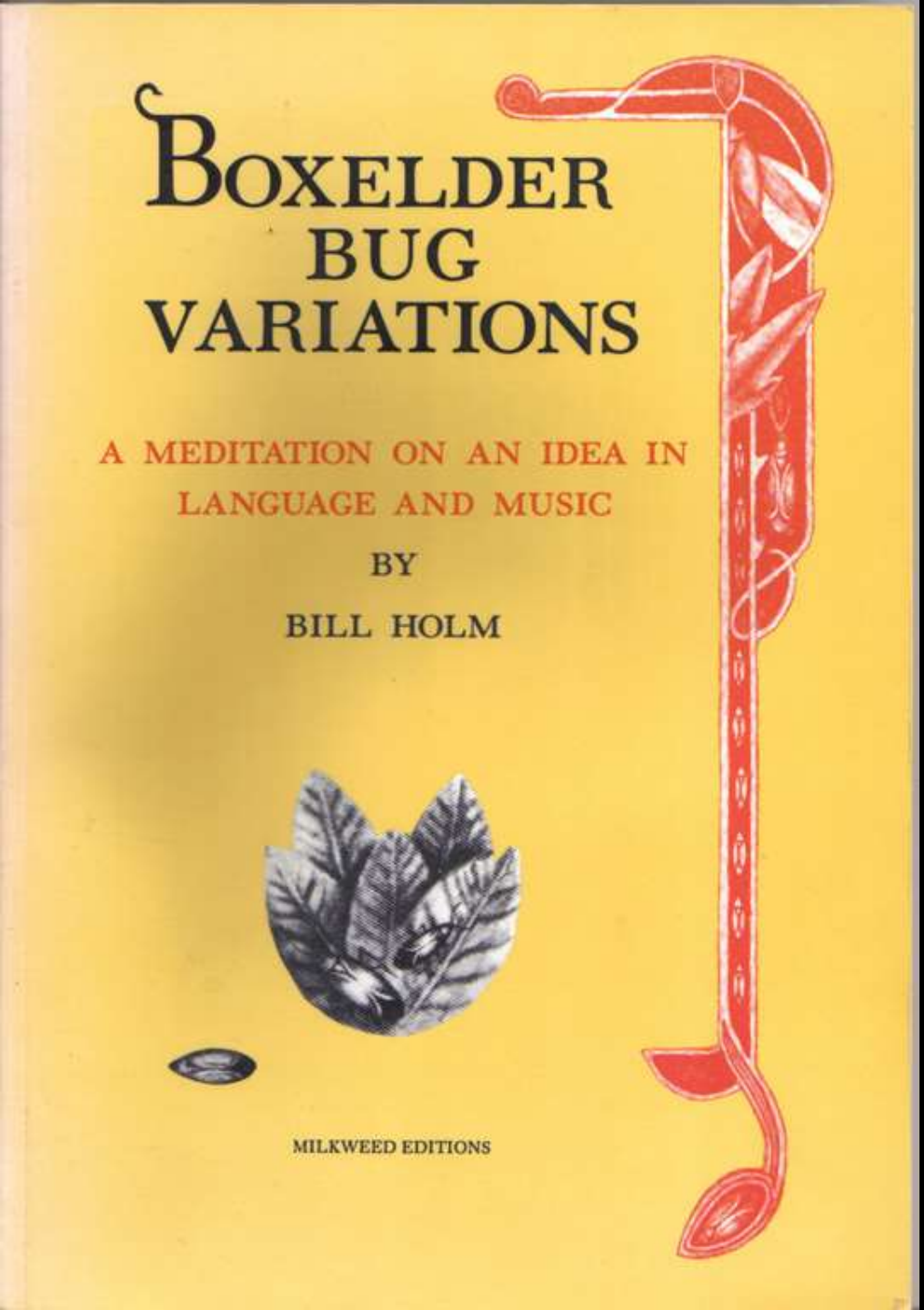
Dispatch individual insects as they are observed

# Keep in Mind:
# These insects are not reproducing in the home

Ultimately they will move back outdoors or die

…and remember -
These kinds of problems
happen to the nicest of people

*Its Not Your Fault!*




**Let us always keep "nuisance invaders" in proper perspective**

A Poem on the Subject:

# *The Boxelder Bug Prays*

I want so little,
For so little time,
A south window,
A wall to climb,
A radio knob,
Nothing to eat,
Nothing to rob,
Not love, not power,
Not even a penny,
Forgive me only for
being so many.

- Bill Holm