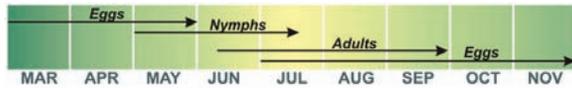
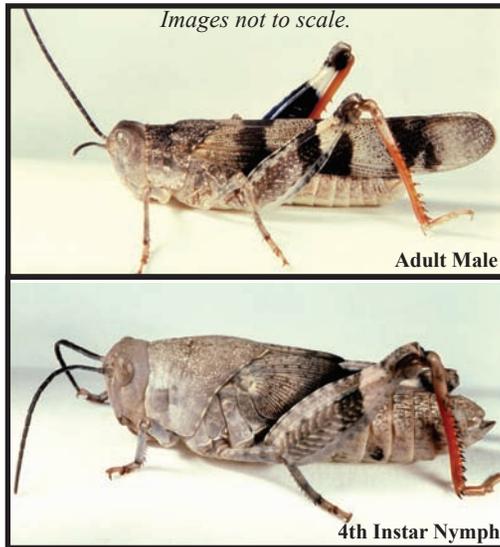


## Threebanded Grasshopper

*Hadrotettix trifasciatus*



### Facts

- Large bandwinged species, males make a crackling sound when they fly.
- Feeds on poor forage and poisonous plants as well as forage grasses.
- Usually found on hilltops and slopes.
- Eggs hatch in early May.

### Adult Identification

- Tan with a round head and long antennae.
- Hind wings light yellow with an outer dark band.
- Fore wings with three dark bands across width.
- Body length: females - 1.25", males 1".

### Immature Identification

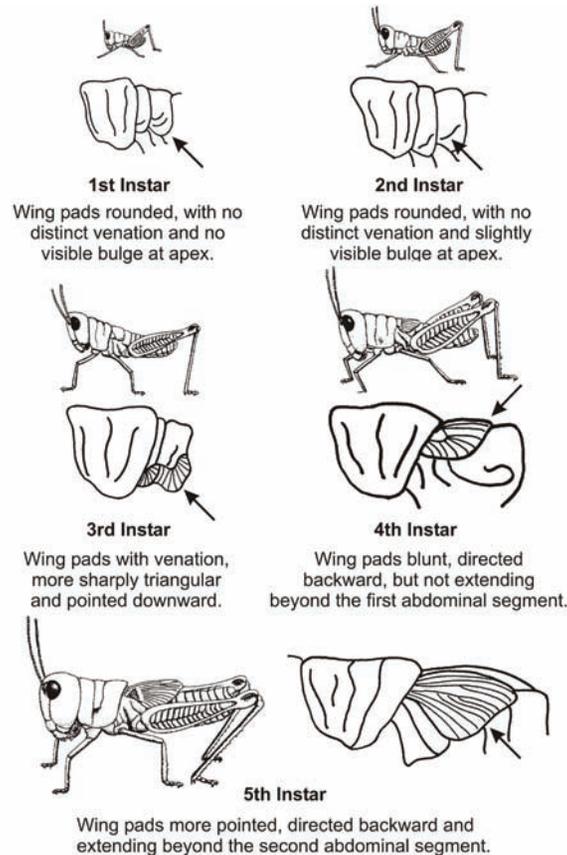
- Tan with large, round head and long antennae.
- Hind legs have a dark brown band across them.
- 4<sup>th</sup> instar nymph body length: 0.75".

**Acknowledgments:** Our thanks to Dr. Robert E. Pfadt (retired), Dr. Jeff Lockwood and Scott Schell of the University of Wyoming and the USDA for graphics used in this publication. Financial support for this guide was provided by a grant from USDA Animal and Plant Health Inspection Service.

## Biology and Management

On rare occasions, high populations of early season range grasshoppers coincide with slow growth of spring grass, causing economic loss. Most early season range grasshoppers overwinter in the nymphal stage. These grasshoppers survive by hiding under debris and organic matter. These nymphs, along with a few very early hatching species, feed on cool-season grasses as soon as they begin to green up. Several species can cause early-season feeding damage, some more seriously than others, thus identification is important. Nymphs are easier to control than adults because they are smaller and wingless. Identification of the nymphal development stage is important because control efforts should target the 3rd and 4th instar stages.

### Nymph Development



# GRASSHOPPER IDENTIFICATION GUIDE

## for Rangeland Grasshoppers Fall/Spring Feeding Species

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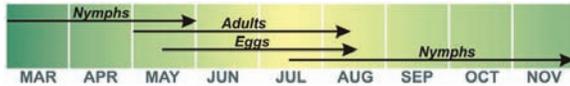
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## Specklewinged Grasshopper

*Arphia conspersa*



### Facts

- Large bandwinged grasshopper; males make a crackling sound when they fly.
- Hatches in mid-July and overwinters as a 5<sup>th</sup> instar nymph.
- Feeds on grasses and sedges by clipping blades near the base; often cuts more than it consumes.

### Adult Identification

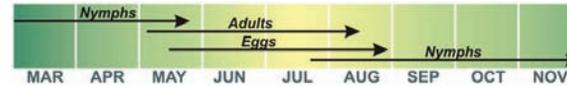
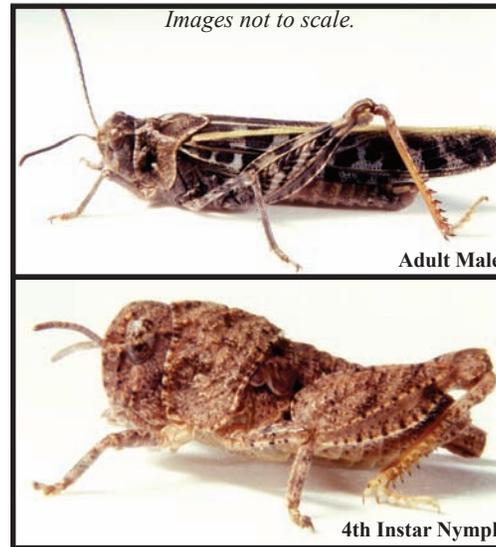
- Brown with yellow on the abdomen.
- Hind wings with red or yellow bands.
- Body length: females - 1.3", males - 0.75".
- The head is rounded, pronotum (plate behind head) with a ridge down the middle.

### Immature Identification

- Dark brown with brown speckles.
- 4<sup>th</sup> instar nymph body length: 0.5".
- Head large and round, pronotum with a ridge down the middle.

## Redshanked Grasshopper

*Xanthippus corallipes*



### Facts

- The largest bandwinged grasshopper; can fly more than 30 feet while making a crackling sound.
- Hatches in late July and overwinters as 5<sup>th</sup> and 6<sup>th</sup> instar nymphs.
- Feeds on grasses and sedges by clipping blades near the base; often cuts more than it consumes.

### Adult Identification

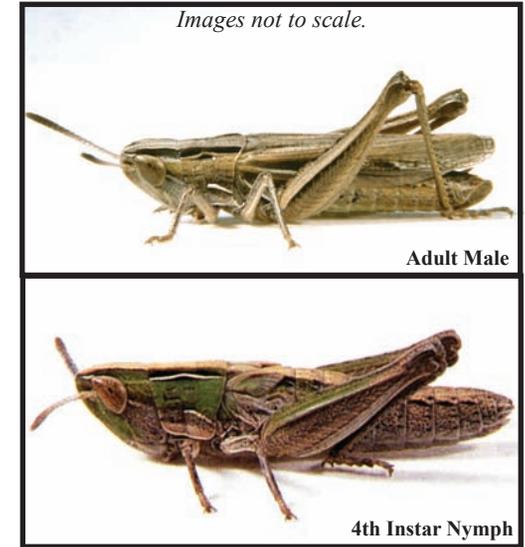
- Brown, forewings with large brown spots.
- Hind wings yellow with dark bands.
- Inner side of legs have a red coloration.
- Body length: Females -1.5", males - 1".
- Head rounded with a densely pitted pronotum (plate behind head).

### Immature Identification

- Brown or gray with dark spots.
- 4<sup>th</sup> instar nymph body length: 0.4".
- Hind leg with a wide keel and dark diagonal bands.

## Velvetstriped Grasshopper

*Eritettix simplex*



### Facts

- A small grasshopper with a slant-faced head.
- Hatches in July and overwinters as a 3<sup>rd</sup> or 4<sup>th</sup> instar nymph.
- Feeds on grasses and sedges by clipping blades near the base; often cuts more than it consumes.
- Seldom reaches economically damaging numbers.

### Adult Identification

- Tan with brown or brown-green markings the length of the body.
- Body length: females - 0.9", males - 0.6".
- Both top of head and pronotum (plate behind head) with three ridges down their length.
- Side ridges of pronotum cream-colored and constricted near the middle.

### Immature Identification

- Pale tan to green with brown side bands near top of head and pronotum.
- 4<sup>th</sup> instar nymph body length: 0.4".
  - Slanted face and head with three ridges