

# Orthoptera of Alberta: Visual Guide to Common Terrestrial Families (Adults)

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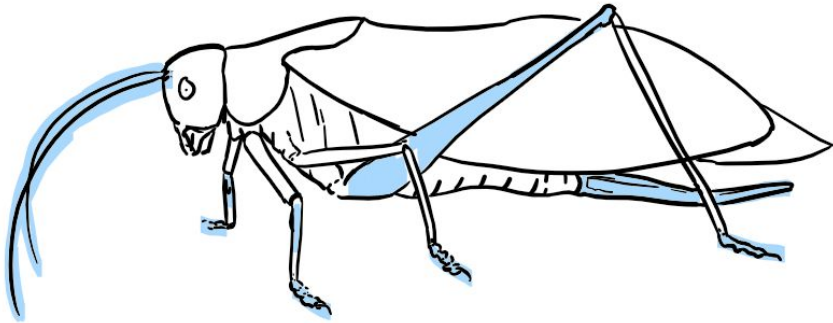
# Orthoptera Defining Traits



- Hind legs often enlarged for jumping (or digging, running), with hind femur enlarged
- If present, forewings usually thickened, narrow, leathery, and parallel-sided (tegmina)
- If present, hindwings usually broad, fan-shaped, and membranous with numerous cross-veins, folded under tegmina
- Filiform antennae
- Hypognathous head type
- Well developed compound eyes (ocelli may be present or absent)
- Mandibulate chewing mouthparts
- Shield-like pronotum covering much of the thorax
- Tarsi 3- or 4-segmented
- Cerci unsegmented and short
- Females have well-developed ovipositor

# Tettigoniidae

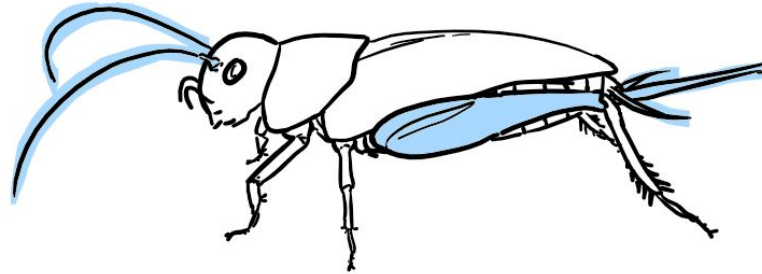
katydids



- Long antennae
- Females have a long ovipositor
- Hind legs are long, thin, and sit along to the body
- Tend to be nocturnal
- Solitary

# Gryllidae

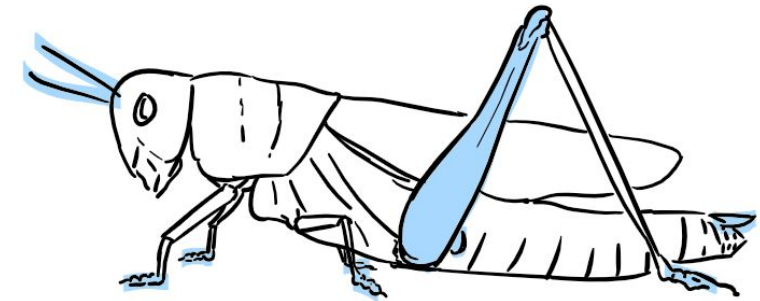
true crickets



- Long antennae
- Females have a long ovipositor and cerci
- Hind legs splay out to the side
- Tend towards nocturnal
- Social and found in groups

# Acrididae

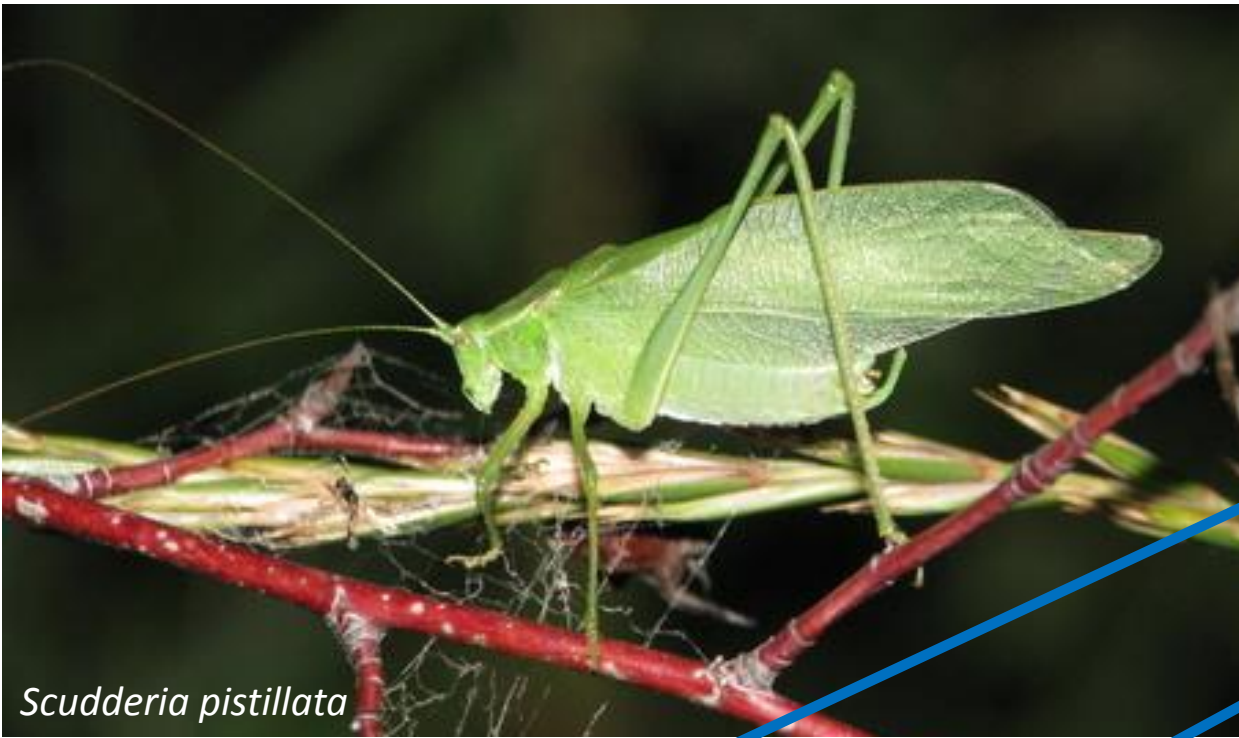
grasshoppers/locusts



- Short antennae
- Thick femurs sit along the body
- Diurnal

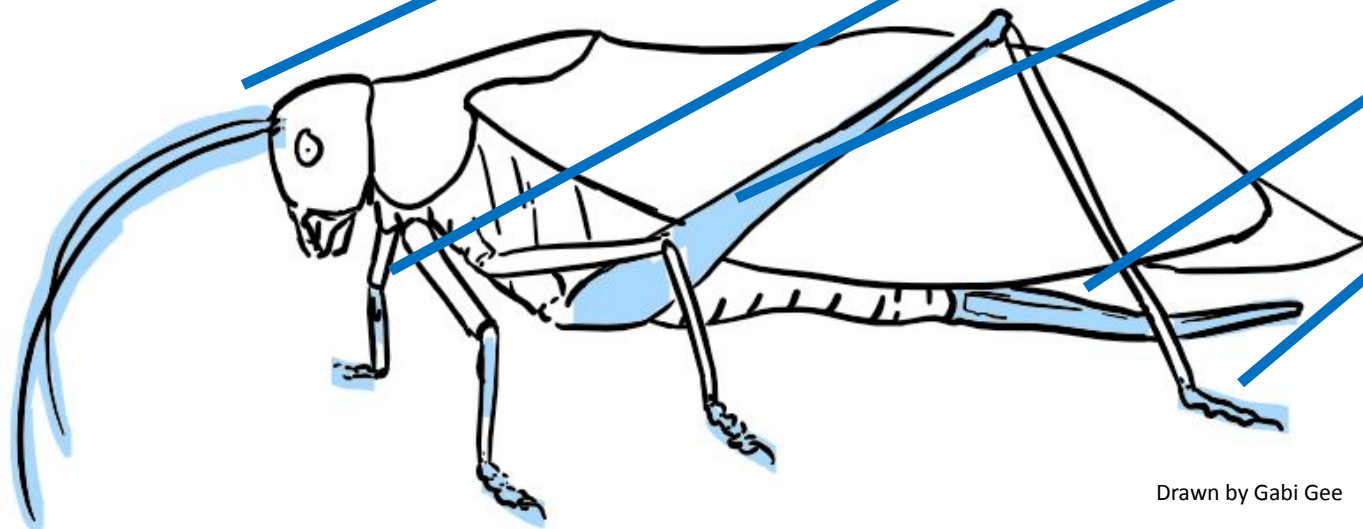
Drawn by Gabi Gee

# Tettigoniidae (katydids)



*Scudderia pistillata*

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Drawn by Gabi Gee

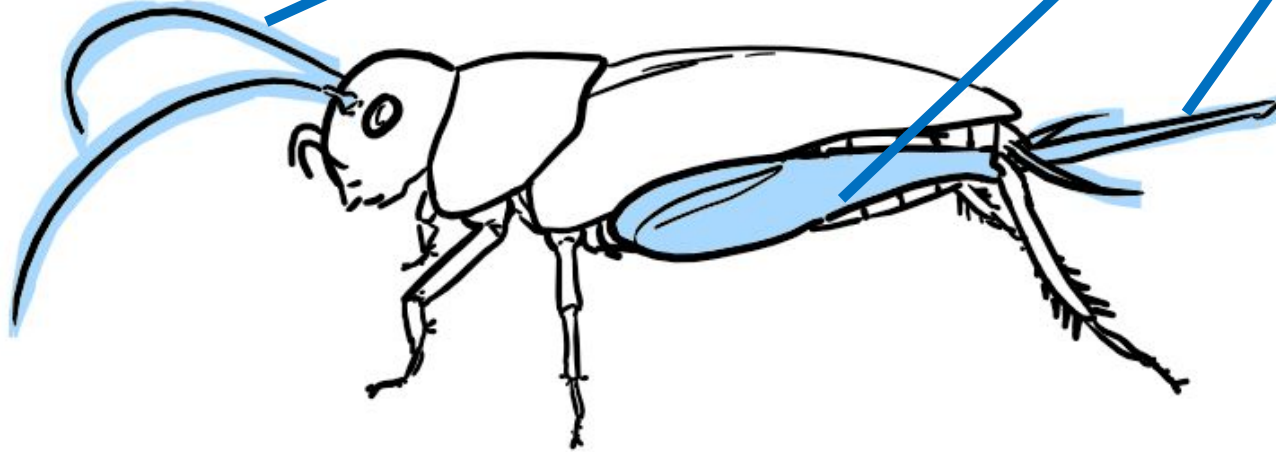
- Antennae long, extend at least to abdomen
- May have tympana present on front tibiae
- Long, thin femurs which sit close to the body
- Females have a long blade-like ovipositor
- 4 segmented tarsi
- Solitary
- Tend to be nocturnal

# Gryllidae (true crickets)



*Gryllus pennsylvanicus*

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- **Antennae** long, tapering, extending at least to abdomen
- **Femurs** positioned outwards from body
- Females have **cerci** and long, slender **ovipositor**
- Tympana on front tibia
- Tarsi have no more than 3 segments
- Gregarious (social and gather in groups) and make a lot of noise
- Tend to be nocturnal

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# Acrididae

## (short-horned grasshoppers)



*Hesperotettix viridis*

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- Stout **antennae**
- Thick **femurs** with knobby flexor surfaces that sit against the body
- **Tympana** on both sides of first abdominal segment
- 3 segmented **tarsi**
- Males and females have **cerci**
- Females have a short **ovipositor**
- Solitary (some species can become gregarious, undergoing morphological change into locusts)
- Diurnal

# References

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