

Glossary

abdomen • the third or posterior division of the insect body, the other divisions being the head and thorax

annual • herb that lives for only one growing season

antenna (pl. antennae) • paired, elongate sensory structures located on the head

anterior • referring to the front or forward position

biennial • herb that lives for two growing seasons, with vegetative growth in the first season and reproduction in the second season

biodiversity • the diversity of life forms in an ecosystem, usually based on species richness

broadleaf • a plant with a flat, wide leaf structure

carina (pl. carinae) • an elevated, longitudinal ridge on the pronotum

cercus (pl. cerci) • paired appendages near the posterior end of the abdomen

crepitation • crackling sound produced during flight by rubbing the under surface of the forewings against the veins of the hindwings

dorsal • referring to the upper surface, which in grasshoppers is the “back”

endemic • sometimes used to indicate species that are native to an area and found nowhere else; precinctive

exotic • not naturally found in an area; alien

femur (pl. femora) • the third and stoutest segment of the leg; the “thigh”

forb • a broadleaf herb

forewing • the front pair of wings, closest to the head, and usually covering the hindwings when the insect is not in flight

frontal costa • a broad, flat ridge on the face of the grasshopper, also called frontal ridge

frontal ridge • a broad, flat ridge or elevated region on the front of the head, extending from the eyes to above the mouth

furcula • a forked process at the posterior of male grasshoppers that overlays the supra-anal plate; only the processes are visible, so it appears to be paired structures

grass • common name for plants in the family Graminae; monocotyledenous plants

hammock • a forested area that is dominated by broadleaf trees

head • the forward, or anterior, division of the body, followed by the thorax and abdomen

herb • nonwoody, short-lived plant

herbivore • a plant-feeding animal

hindwings • the second pair or posterior pair of wings; in grasshoppers capable of flight, these are the larger wings, but they fold and are hidden beneath the forewings when the grasshopper is at rest

horizontal • oriented in a plane parallel to the horizon, or along the length of the body

instar • the stage of the grasshopper between molts; this term is applied to nymphal grasshoppers, usually in combination with a number to indicate whether it is early in development (e.g., 1st instar) or late (e.g., 5th instar)

lateral • relating to the side

leg • appendage associated with the thorax and used for terrestrial locomotion

mesic • a moist but not wet environment

metamorphosis • change in body form (e.g., change from a caterpillar to a moth)

molt • to cast off the outgrown exterior body covering, a process that occurs between instars

nutrient cycling • the movement of nutrients, usually mineral in nature, among trophic levels

nymph • the young of grasshoppers; immature insects that resemble the adult in body form, differing principally in wing development and reproductive capabilities

pallium • an erect conical structure at the tip of the supra-anal plate

posterior • referring to the back or rear position

precinctive • native or endemic species, not known to occur elsewhere

pronotum • the upper, or dorsal, section of the prothorax, the first of the three abdominal segments; in grasshoppers the pronotum largely hides the mesonotum and metanotum

prosternal spine • a small spur or spine located ventrally on the first thoracic segment; a spine protruding from between the front legs, especially in the subfamily Cyrtacanthacridinae

prothorax • the first, or anterior, segment of the three thoracic segments

shrub • a woody plant, typically with several major stems

species • groups of actually or potentially interbreeding populations that are reproductively isolated from other groups

speciation • the evolution of species

stridulation • creaking sound that grasshoppers produce while not in flight by rubbing the inner surface of the hind femur on the edges of the forewing

spine • elongate, pointed structure; in cyrtacanthacridine or “spurthroated” grasshoppers a large spine or spur called the prosternal spine is present between, or slightly in front of, the front legs, but it is sometimes reduced to a bluntly rounded elevation; small but sharply pointed spines also occur in rows along the tibiae

spur • see “spine” above

subgenital plate • a plate at the tip of the abdomen that covers the genital area from below; it tends to be curved upward and scoop-shaped

supra-anal plate • a plate at the tip of the abdomen that covers the genital area from above; it is flat and triangular or shield-shaped

sword-shaped antenna • antenna with flattened segments, widening from the base and then narrowing toward the tip

tarsus (pl. tarsi) • the distal segment of the leg, the “foot”

tegmen (pl. tegmina) • the thickened forewings

thorax • the second, or middle, of the three major body divisions

tibia (pl. tibiae) • the long, thin fourth segment of the leg, between the femur and tarsus

tree • a woody plant, typically with one major stem

tympanum (pl. tympana) • a tightly stretched membrane covering the auditory organ, and located on the side of the abdomen

ovipositor • the structures located at the tip of the abdomen in females and used to deposit eggs

perennial • a plant living several years, not dying soon after reproduction

wing pad • the partly developed wings located at the juncture of the thorax and abdomen

vertical • oriented up and down

ventral • refers to the underside, or below

xeric • a very dry environment