

## Bee Vocabulary

**Angulate** – forming an angle rather than a curve

**Anterior** – Toward the head or on the head side of a segment being described

**Apex** – end of any structure

**Apical** – near or at the apex or end of any structure

**Appressed** – tight and flat against the body of the bee, usually used to describe hair

**Arcuate** – curved like a bow

**Areolate** – integumental (skin) sculpture pattern: divided into a number of small irregular spaces, very similar if not used interchangeably with reticulate

**Arolia** – the pad between the claws found at the ends of some bees legs

**Bands** – Usually referring to bands of hair or bands of color that traverse across an abdominal segment from side to side

**Basad (Basally)** – toward the base

**Base (Basal Area)** – on whatever part being described, this would be the section or the area at or near to the point of attachment, or nearest the main body of the bee, the opposite end of which would be the apical area

**Basitarsus** – the segment of the tarsus that is the nearest to the bee's body....usually the largest of all the tarsal segments

**Basitibial plate** – a small plate or saclike projection at the base of the hind tibia (like a bee knee pad)

**Bifid** – cleft or divided into 2 parts; forked

**Carina** – a clearly defined ridge or keel, not necessarily high or acute, usually appears on bees as simply a raised line

**Carinate** – keeled; having keels or carinae

**Caudad** – towards the tail, or on the tail side of a segment being described

**Cheeks** – the lateral part of the head beyond the compound eyes, includes the gena and the subgena

**Clypeus** – A section of the face below the antennae, demarcated by the epistomal sutures

**Conically** – cone shaped, with a flat base, tapering to a what is usually a blunt or rounded top

**Convex** – the outer curved surface of a segment of a sphere, as opposed to concave

**Costa** – wing vein

**Coxae** – the basal segment of the leg

**Cubital** – wing vein

**Denticle** – a small tooth-like projection

**Disc** – a generic term for the middle surface of a plate (usually in reference to an abdominal segment) as apposed to what might be going on along the sides

**Distal** – away from the body or a description of a place on a segment that is furthest from the place of attachment with the body of the bee

**Dorsum** – in general, the upper surface

**Echinate** – thickly set with short, stout spines or prickles

**Emarginate** – a notched or cut out place in an edge or margin, can be dramatic or simply a subtle inward departure from the general curve or line of the margin or structure being described

**Fasciae** – a transverse band or broad line, in bees often created by a band of light colored hairs on the abdomen

**Ferruginous** – rusty, red – brown, orange-brown

**Flagellum** – the third and remaining part of the antenna beyond the pedicel and scape, containing most of the antennal segments

**Fore** – usually refers to the first pair of legs, the ones closest to the head

**Foveae** – a depressed region of cuticle, in bees this depressed area is usually only very slightly hollow and usually on the face

**Fulvous** – a brownish yellow-tawny color to orange brown

**Fuscous** – dark brown, approaching black; a plain mixture of brown and red

**Glabrous** – a surface without any hairs

**Glossa** – part of the tongue

**Gradulus** – a line that runs from side to side on abdominal segments of some bees that is formed by the step between two regions that differ in height, often that difference is only apparent upon very close inspection

**Hyaline** – transparent, glassy

**Hypoepimeral** – area on the thorax

**Hypostoma** – the notched region underneath the head and behind the mandible that holds the folded tongue

**Impressed Area** – almost always refers to the rear part of the upper abdominal segments, these areas often being very slightly (often very difficult to detect) lower than the front part of the segment

**Impunctate** – not punctate or marked with punctures or pits

**Infuscated** – smoky gray-brown, with a blackish tinge

**Inner** – usually refers to legs and refers to the part that faces the body

**Integument** – the outer layer of the bee; the skin or cuticle

**Intercubital** – wing vein

**Interstitial** – when describing veins it refers to the end of one approximating the beginning of another, as in a grid intersection

**Labrum** – abutting the clypeus in front of the mouth

**Macula** – a spot or mark

**Maculations** – spotted or made up of several marks

**Malar space** – the shortest distance between the base of the mandible and the margin of the compound eye often completely absent in bees

**Mandibles** – bee teeth, so to speak, usually crossed and folded in front of the mouth

**Marginal cell** - a wing cell located on the edge (margin) of the wing

**Mesally (Medially)** - pertaining to, situated on, in or along the middle of the body or segment

**Mesopleura** – or mesothorax, the second or middle segment of the thorax bearing the middle legs and the forewings

**Metapleura** – thorax segment bearing the hind legs and hind wings

**Notaulices** - a pair of lines on some bees that appear on either side of the scutum near the base of the wings

**Ocelli** – the 3 simple eyes or lenses that sit at the top of the head of bees

**Ochraceous** – pale yellow

**Papillae (Papillate)** – very tiny short hard cone-like projections usually in bees only found on the wing or legs and often having small hairs arising from the top

Outer – usually refers to legs and specifically to the surfaces facing away from the body

**Pectinate** – comb-like, having large comb-like teeth that are clearly separate from one another

**Petiolate** – having a stalk

**Piceous** – glossy brownish black in color, pitch like

**Pleura** - the lateral or side areas of the thorax, excluding the lateral surfaces of the propodeum

**Plumose** – feather-like

**Pollex** – a thumb; the stout fixed spur at the inside of the tip of the tibia

Posterior – toward the tail end or on the tail end of a segment being described

**Preapical** – referring to a section of a bee that is just physically found just before the outermost (or apical) end of the section or segment

**Pronotum** – a collar-like segment on the thorax and directly behind the head; extends down the sides of the thorax toward the first pair of legs

**Propodeum** – the last segment of a bees thorax (although you wouldn't know to look at it, it is considered anatomically part of the abdomen)

**Prothoracic** – of or pertaining to the prothorax

**Protuberant** – rising or produced above the surface or the general level, often used as a term to define a single or pair of small bumps

**Proximal** - that part nearest the body

**Pubescent** – downy; clothed with soft, short, fine, loosely set hair

**Pygidial plate** – unusually flat area (a plate) surrounded by a ridge or line and sometimes sticking well off of the end of the bee. If present, found on the sixth upper abdominal segment in females, seventh in males

**Repose** – in a retracted physical state

**Reflexed** – bent up or away

**Reticulate** - made up of a network of lines that creates a set of netlike cells, similar to areolate except perhaps more of a regular network of cells...undoubtedly both have been used to describe the same patterns at times

**Rugose** – a wrinkled set of bumps that are rough and raised like a short nappy rug

**Scape** - the first or basal segment of the antenna

**Scopa** - a brush; a fringe of long dense and sometimes modified hairs designed to hold pollen

**Scutellum** - shield shaped plate behind scutum

**Scutum** - the large segment on top of the thorax located between the wings and behind the head

**Serrate** – notched on the edge, like a serrated knife

**Setose** - covered with setae or stiff short hairs

**Sinuate** – the margin with wavy and strong indentations

**Spatulate** – shaped like a spatula

**Spicule** - small needlelike spine

**Spinose** - armed with thorny spines, more elongate than echinate

**Sterna** – the plates on the underside of the abdomen

**Stigma** - a thickened colored spot or cell in the forewing just behind the costal cell

**Striae** – a set of parallel lines (usually raised) and can be thick or thin

**Subapical** - located just behind the apex of the segment or body part

**Subcontiguous** – not quite contiguous or touching

**Subequal** - similar but not necessarily exactly equal in size, form, or length

**Submarginal cells**- one or more cells of the wing lying immediately behind the marginal cells

**Subrugose**- a bit bumpy but not forming an extensive set of wrinkled bumps

**Sulcus** - groove; more of an elongate hole or puncture in the skin of the bee

**Supra** - above, beyond or over

**Supraclypeal area** - the region of the head between the antennal sockets and clypeus, demarcated on the sides by the subantennal sutures

**Suture** - a groove marking the line of fusion of two distinct plates on the body or face of a bee

**Tarsus** - the leg segments at the end of the bees leg, attached to the tibia

**Tegulae** - the usually oval, small shield like structure carried at the extreme base of the wing where it attaches to the body

**Tergum** – the segments on the top side of the abdomen

**Tessellate** – small very fine lines that make up a network of squares like a chessboard on the surface of the skin. Can often be very faint markings that appear like fingerprints on the shiny surface of the skin.

**Testaceous** - brownish-yellow

**Tibia** - segment of the leg, between the femur and the tarsus

**Tomentum** – a form of pubescence composed of short matted, woolly hair

**Tomentose** - covered with tomentum

**Transverse** – across the width of the body or segment rather than the length, in other words at right angles to the head to abdomen axis of the body

**Trochanters** – segment of the insect leg between the coxa and the femur

**Truncate** – cut off squarely at tip

**Tubercle** – a small knoblike or rounded protuberance

**Undulate** – wavy

**Venter** – the undersurface of a section of a bee or bee part, usually the abdomen

**Ventral** – pertaining the undersurface of the abdomen

**Vertex** – the top of the head

**Violaceous** – violet colored