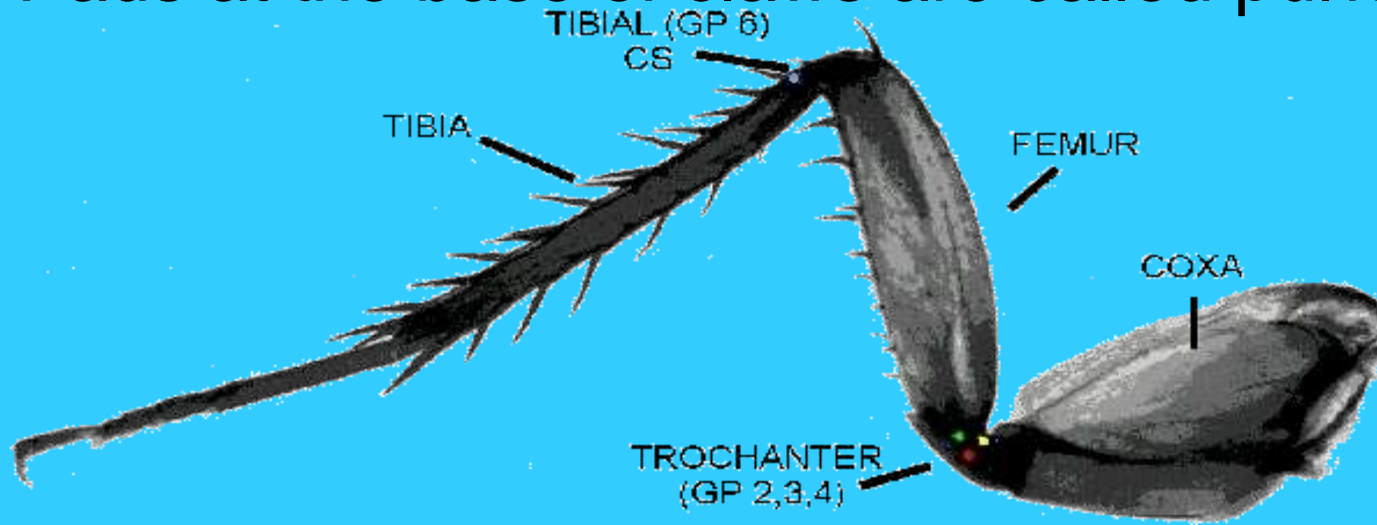


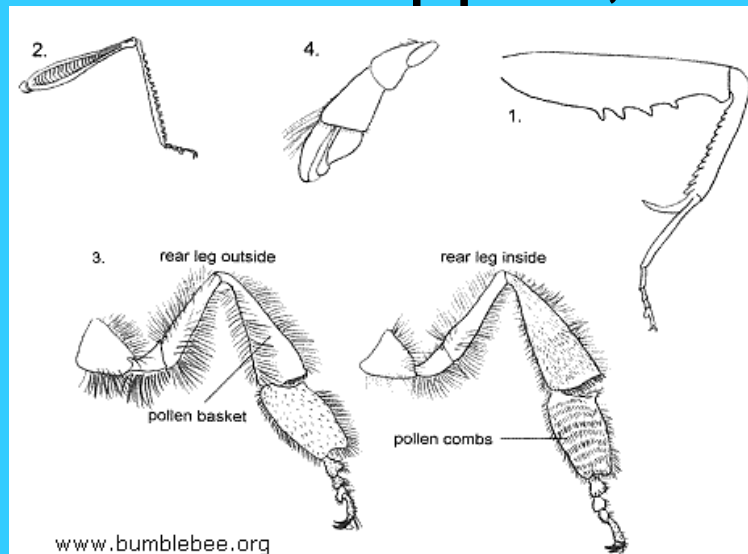
***Modification
of legs in
insects***

Structure of typical insect legs

- Consist of 5 segments namely Coxa , trochanter, femur , tibia and tarsus .
- Tarsus consist of 1-5 small segments called tarsomeres.
- Last tarsomere bears a pair of claws
- A pad between the claws is called Arolium
- Pads at the base of claws are called pulvilli



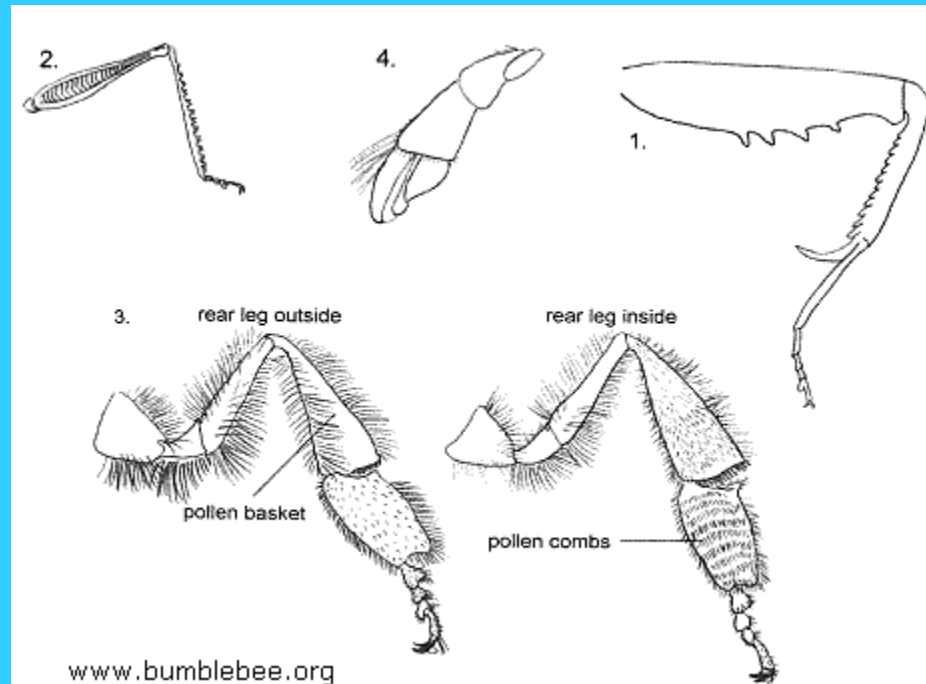
- While the legs are normally adapted for walking many insects have them modified for variety of functions.
- Various modifications are
- Saltatorial legs –Hind legs adapted for leaping or jumping . The femur is greatly enlarged giving articulation for large muscles of tibia which are used in jumping occur in Grasshopper , Cricket



- Raptorial :-

- »Forelegs are modified for grasping the prey

- »Occur in praying mantis



- Scansorial

The legs of louse are modified for clinging the tibia being stout and bearing at one end a thumb like process with a distal tarsal segment and a curved pretarsal claw . While grasping the body , tarsus and pretarsus work against the thumb

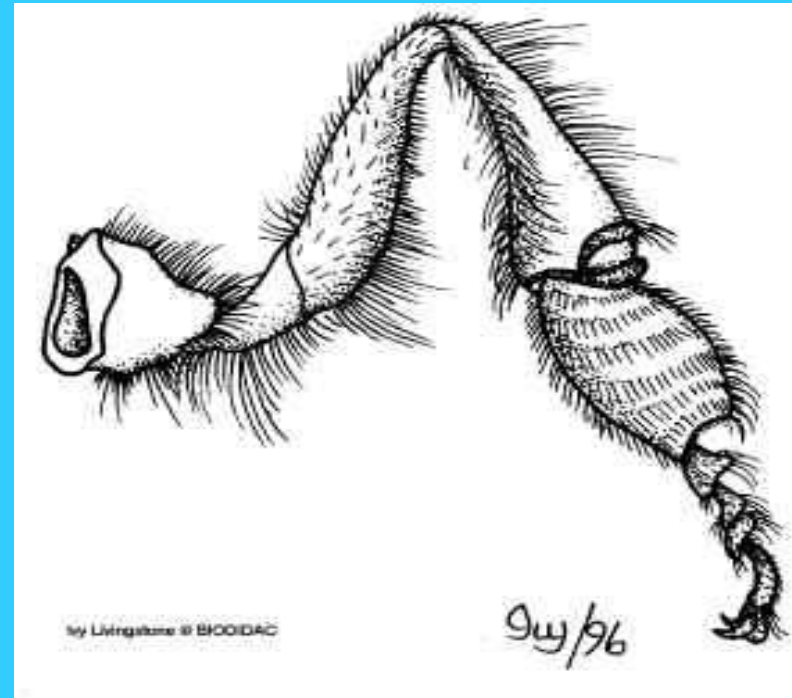
- *Natatorial*

- » The hind legs are adapted for swimming.
- » Femur, tibia and 1st foretarsal segment are broad and flat with dense flat setae serving as oars
- » Occur in aquatic beetles



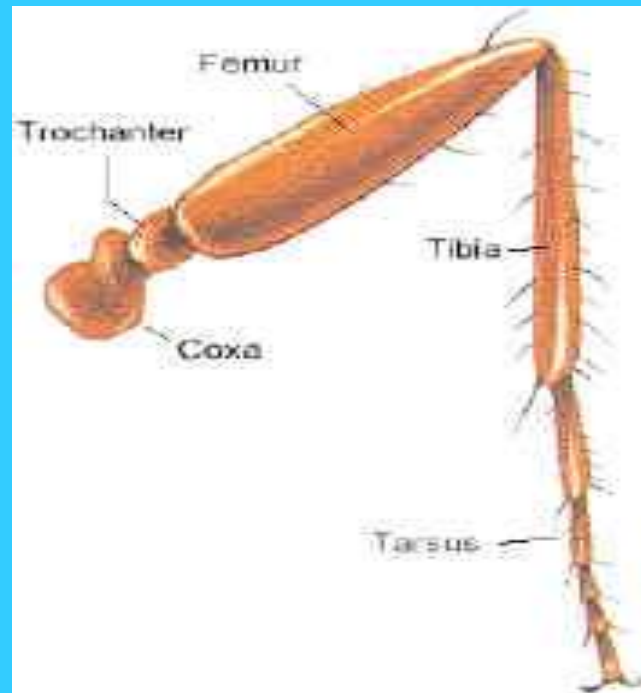
• Foraging

- » Legs of honeybee are adapted for various functions .
- » There is a pollen comb on inner surface of 1st segment of hind tarsus to remove pollen from body,
- » A pollen basket on outer surface of hind tibia
- » Spur on the apex of middle tibia to scrape pollen from the baskets
- » Antennal comb on the front legs to remove pollen from antennia



- **Cursorial**

- » Legs are long and slender for running
- » occur in cockroach



- **Fossorial**

- » Stout , spade like legs for digging in ground
- » Occur in mole cricket



Stridulatory

Legs have sound producing apparatus
Occur in cricket

Auditory

Legs with sound producing tympanum
Occur in long horned grasshopper