

## Distinguishing Between Beetles and Bugs

### Beetles Have:

- Body shape round to oval;
- Forewings hard, leathery and hind wings thinner and hidden;
- Wing covers (elytra) meet at a straight line down the middle of the abdomen;
- Visible antennae of different lengths and shapes with 10-11 segments;
- Chewing mouthparts.

Red milkweed beetle



### Bugs Have:

- Body shape shield, round or oval;
- Forewings often thickened, hind wings membranous and visible;
- Wing covers form a large X on the back with their medial edge and triangular scutellum;
- Visible antennae with 4-5 segments;
- Sucking mouthparts with long proboscis that folds between legs.

Small milkweed bug



## Distinguishing Between Flies and Bees/Wasps

### Flies Have:

- Large round eyes that cover face;
- Short antennae that are hard to see;
- Stout body shape without a waist;
- One pair of wings longer than body;
- Head large and round;
- Often mimic bees and wasps in appearance.

**Bee fly**



### Bees/Wasps Have:

- Eyes that are long, oval and at side of face;
- Long easy to see antennae often with kink or elbow;
- Hourglass body shape with waist and cylindrical thorax and abdomen;
- Two pairs of wings shorter than body, often resting on back;
- Head triangular or tear shaped.



**Western sand wasp**

## Distinguishing Between Butterflies and Moths

### Butterflies Have:

- Tent shaped wings held high above body;
- Antennae with knob at end;
- Typically more brightly colored;
- Generally fly during day.



Island Marble butterfly

### Moths Have:

- Wings held flat along body;
- Antennae simple and feathery ending in a fine point;
- Typically dull or iridescent colors;
- Generally fly at night.



Western tent moth