100 COMMON ARTHROPODS OF NEW MEXICO FOR 4H YOUTH
Pt. 2—Non-Insect Classes

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All of the Arthropods Included in this Program will be Non-Insects

- Metamorphosis type: ‘None’
- Mouthpart Types---will depend on which group is shown. Some will be ‘sucking’, some ‘chewing’ and a few others can be ‘both’.
Sowbug
Arthropoda: Class Crustacea, Order Isopoda

Metamorphosis: None
Mouthparts: Chewing

Terrestrial, but preferring areas of high humidity or damp spots. Usually <10mm long, multi-segmented, armadillo-like appearance. Gray to nearly black. Antennae present, bending at several points. 7 pairs of legs. (NO ORDER RECOGNIZED HERE)
Millipede
Arthropoda: Class Diplopoda

- Metamorphosis: None
- Mouthparts: Chewing
- E.g. *Orthoporus ornatus* – adults usually over 4” long

Multi-segmented, many cylindrical but some relatively flat; with 2 pr short, jointed legs per segment. Short antennae. NOT venomous; can stain hands or smell bad in self defense. (NO ORDER RECOGNIZED HERE)
**Centipede**

*Arthropoda: Class Chilopoda*

- **Metamorphosis:** None
- **Mouthparts:** Chewing

**Desert centipede** – *Scolopendra sp.*

- Many-segmented, usually flattened body with one pair short jointed legs/segment; hollow poison claws near head. Larger species have painful, venomous bites; house centipedes run very quickly in zig-zag pattern across floors, but aren’t considered dangerous to humans or pets. Colors variable: red, orange, brown, gray and green. Antennae present. NO ORDER RECOGNIZED HERE.

**House centipede** – *Scutigera coleoptrata*

Both Photos: D.B. Richman, NMSU
Arthropoda: Class Arachnida
Spiders, Scorpions, Mites & Ticks

• Tiny to large arthropods
• Usually with 2 body regions: prosoma (cephalothorax) & opisthosoma (abdomen—sometimes segmented)
• Always wingless; 4 pairs walking legs usually
• Eyes simple
• No antennae; pedipalpi or one pair of legs often substitute for antennae
• Mouthparts combination of chewing/sucking often
• No metamorphosis
Scorpion
Arthropoda: Class Arachnida, Order Scorpiones

Metamorphosis: None  Mouthparts: Chewing & Sucking

Medium to large (to 100mm in AZ); with elongated, segmented tails tipped with venomous stingers. Pedipalps claw-like, tipped with pincers.
**Tick**

**Arthropoda: Class Arachnida, Order Acari**

Metamorphosis: None

Mouthparts: Sucking

Brown dog tick, *Rhipicephalus sanguineus*.  
Photo: A. Pauvolid-Correa, Fundacao Oswaldo Cruz, bugwood.org

Fowl Tick, *Argas sp.*  
Photo: Mat Pound, USDA-ARS, bugwood.org

Largest species are several mm long. One body region only with 8 legs. Exoskeleton leathery, flattened in unfed ticks. Bodies globose when engorged with blood. Head visible from above in ‘hard ticks’ (e.g. dog tick) but not visible from above in ‘soft ticks’ (fowl tick). Can transmit Certain diseases to mammals and birds.
Spiders
Arthropoda: Class Arachnida, Order Araneae

Metamorphosis: None         Mouthparts: Chewing & Sucking

Tiny to large arachnids; spin silk from spinnerets on end of opisthosoma. All spiders spin silk but not all make webs. With fangs. ‘Venom’ quiets or kills prey, begins digestion. 2 body regions, 8 legs.

Jumping spider
Jumping spider
Jumping spider
Gnaphosid spider
Apache violin spider
Jumping spider
Western Black Widow, Latrodectus hesperus

All Photos: D.B. Richman, NMSU
Other Non-Insect Arthropods Exist

• But Master These First!
• Now, onward to the Insects!

Photo: D. B. Richman, NMSU