

Illustrations and Notes for One Hundred Common Insects of New Mexico

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Unless otherwise noted all photographs are by David B. Richman

REFERENCES

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IDENTIFYING INSECTS

100 Common Insects of New Mexico

- ◇ Orders of Insects and their Relatives
- ◇ Common Names (usually associated with families)
- ◇ Mouthparts
- ◇ Metamorphosis

SOME NON-INSECTS

- Class Crustacea – Sowbugs
- Class Diplopoda – Millipedes
- Class Chilopoda – Centipedes
- Class Arachnida – Spiders etc.
 - Order Araneae – Spiders
 - Order Scorpiones – Scorpions
 - Order Acari – Mites and Ticks

SOME ORDERS OF INSECTS WITH SIMPLE OR NO METAMORPHOSIS

■ Thysanura – Silverfish (no metamorphosis)

■ Odonata – Dragonflies and Damselflies

■ Orthoptera – Grasshoppers

■ Mantodea – Mantids

■ Phasmida - Walkingsticks

■ Blattaria – Cockroaches

■ Isoptera – Termites

■ Dermaptera – Earwigs

■ Anoplura – Sucking lice

■ Hemiptera – True Bugs

■ Homoptera – Aphids,

Cicadas

etc.

SOME ORDERS OF INSECTS WITH COMPLETE METAMORPHOSIS

- Neuroptera – Net-winged insects
- Lepidoptera – Butterflies, Skippers and Moths
- Coleoptera - Beetles
- Siphonaptera - Fleas
- Diptera - Flies
- Hymenoptera – Ants, Bees and Wasps

100 COMMON INSECTS

NON-INSECTS

- CLASS CRUSTACEA – ORDER ISOPODA - Sowbug
- Not true insects
- 7 pairs of legs
- Chewing mouthparts
- Simple metamorphosis
- Antennae
- Scavengers
- No wings



100 COMMON INSECTS

NON-INSECTS

- CLASS DIPLOPODA– Millipede
- Not true insects
- 2 pairs of legs/segment
- Chewing mouthparts
- Feed on plants
- Simple metamorphosis
- Antennae
- No wings



100 COMMON INSECTS

NON-INSECTS

- CLASS CHILOPODA – Centipede
- Not true insects
- 1 pair of legs/segment
- Predators
- Chewing
mouthparts
- Simple
metamorphosis
- Antennae
- No wings



100 COMMON INSECTS

NON-INSECTS

- CLASS ARACHNIDA – Spiders, Scorpions, Mites and Ticks
- Not true insects
- Eight legs (Four pairs)
- Two body parts (cephalothorax or prosoma and abdomen or opisthosoma)
- Chewing/sucking mouthparts
- Simple metamorphosis
- No antennae
- No wings

100 COMMON INSECTS

NON-INSECTS

- CLASS ARACHNIDA – ORDER SCORPIONES
 - Scorpion
- Segmented abdomen
- Two major body parts
- Venomous sting
- Predators
- Claw-like pedipalps



100 COMMON INSECTS

NON-INSECTS

- CLASS ARACHNIDA – ACARI – Tick
- Blood-sucking mites
- Only one body part
- Sucking mouthparts
- Larvae six-legged
- Nymphs and adults
 - Eight-legged

Photo by S. Liesner



100 COMMON INSECTS

NON-INSECTS

- CLASS ARACHNIDA – ARANEAE - Spider
- Produce silk
- Some build webs,
others hunt
for prey
- Predators
- Venom glands
in mouthparts

Brown Recluse



100 COMMON INSECTS

- Class Insecta
- Six legs (three pairs)
- Three body parts (Head, thorax and abdomen)
- Chewing or sucking mouthparts
- Adults usually with wings
- No metamorphosis to complete metamorphosis

100 COMMON INSECTS

- ORDER THYSANURA – Silverfish
- No wings
- Flattened carrot-shaped
- Simple metamorphosis
- Chewing mouthparts
- Scavengers
- Three hair-like appendages
at tip of abdomen



100 COMMON INSECTS

- ORDER ODONATA – Dragonfly
- Strong wings
- Simple metamorphosis
- Chewing
mouthparts
- Large
compound eyes
- Predators on
other insects
- Antennae short,
bristle-like



100 COMMON INSECTS

- ORDER ODONATA – Damselfly
- Weaker flyers
- Simple metamorphosis
- Chewing
mouthparts
- Large
compound eyes
- Predators on
other insects
- Antennae short,
bristle-like



100 COMMON INSECTS

- ORDER ORTHOPTERA – Short-Horned Grasshopper
- Winged or wingless
- Simple metamorphosis
- Chewing
mouthparts
- Mostly plant-feeders
- Jumping hind legs
- Antennae relatively
short



100 COMMON INSECTS

- ORDER ORTHOPTERA – Long-horned Grasshopper
- Most also called katydids
- Winged or wingless
- Mostly plant-feeders
- Simple metamorphosis
- Jumping hind legs
- Chewing
mouthparts
- Antennae long,
bristle-like



100 COMMON INSECTS

- ORDER ORTHOPTERA – Camel Cricket
- Wingless
- Hump-backed
- Jumping hind legs
- Simple metamorphosis
- Chewing
mouthparts
- Antennae long
bristle-like



100 COMMON INSECTS

- ORDER ORTHOPTERA – Jerusalem Cricket
- Wingless
- Burrowing
- Simple metamorphosis
- Jumping hind legs
- Chewing
mouthparts
- Predators on
other insects
- Antennae short,
bristle-like



100 COMMON INSECTS

- ORDER ORTHOPTERA –Cricket
- Usually with wings
- Common
- Jumping hind legs
- Simple metamorphosis
- Chewing
mouthparts
- Usually herbivorous
- Antennae long,
bristle-like



100 COMMON INSECTS

- ORDER MANTODEA – Mantid
- Winged or Wingless
- Raptorial front legs
- Simple metamorphosis
- Chewing
mouthparts
- Predators on
other insects
- Antennae short,
bristle-like

Photo by Howard Beuhler



100 COMMON INSECTS

- ORDER PHASMIDA – Walkingstick
- Usually Wingless
- On shrubs and trees
- Simple metamorphosis
- Chewing
mouthparts
- Feed on plants
- Antennae long or short
bristle-like



100 COMMON INSECTS

- ORDER BLATTARIA –German Cockroach
- Pests in houses
- Simple metamorphosis
- Chewing
mouthparts
- Feed on a wide variety of
foods
- Antennae long,
bristle-like



100 COMMON INSECTS

- ORDER BLATTARIA – Oriental Cockroach
- Females wingless, males winged
- Pests in houses, sewers
- Simple metamorphosis
- Chewing
mouthparts
- Feed on a wide variety
of foods
- Antennae long,
bristle-like



100 COMMON INSECTS

- ORDER BLATTARIA – American Cockroach
- Adults with wings
- Pests in houses, sewers
- Simple metamorphosis
- Chewing
mouthparts
- Feed on a wide variety
of foods
- Antennae long,
bristle-like



100 COMMON INSECTS

- ORDER ISOPTERA – Termite
- Wingless (except unmated reproductives)
- Social
- Simple metamorphosis
- Chewing
 - mouthparts
- Feed on wood
- Antennae short,
 - bead-like segments



100 COMMON INSECTS

- ORDER DERMAPTERA – Earwig
- Wingless or winged
- With claw-like cerci
- Usually under plant material
- Simple metamorphosis
- Chewing
mouthparts
- Plant-feeders or
occasionally
predators on
other insects
- Antennae short,
bristle-like



100 COMMON INSECTS

- ORDER ANOPLURA – Sucking Louse
- Wingless
- Parasitic
- Simple metamorphosis
- Sucking
 mouthparts
- Antennae short,
 bristle-like

Photo by S. Liesner



100 COMMON INSECTS

- ORDER HEMIPTERA – Water Boatman
- Winged as adults
- Aquatic
- Hind legs shaped like oars
- Front legs scoop-like
- Simple metamorphosis
- Sucking
 - mouthparts
- Feed on algae
- Antennae short,
 - bristle-like



100 COMMON INSECTS

- ORDER HEMIPTERA – Backswimmer
- Winged as adults
- Aquatic
- Hind legs shaped like oars
- Front legs NOT scoop-like
- Swims upside-down
- Simple metamorphosis
- Sucking
 mouthparts
- Predatory on other insects
- Antennae short,
 bristle-like



100 COMMON INSECTS

- ORDER HEMIPTERA – Water Strider
- Winged as adults
- Aquatic on surface
- First legs raptorial
- Simple metamorphosis
- Sucking
 mouthparts
- Feed on other insects
- Antennae short,
 bristle-like



100 COMMON INSECTS

- ORDER HEMIPTERA – Plant Bug or Leaf Bug
- Winged as adults
- Terrestrial
- Simple metamorphosis
- Sucking
 mouthparts
- Most feed on plants
- Antennae medium
 long, jointed

Photo by J. Scott Bundy



100 COMMON INSECTS

- ORDER HEMIPTERA – Ambush Bug
- Winged as adults
- Terrestrial – usually on flowers
- Front legs raptorial
- Simple metamorphosis
- Sucking
 mouthparts
- Feed on other insects
- Antennae short,
 jointed



100 COMMON INSECTS

- ORDER HEMIPTERA – Assassin Bug
- Winged as adults
- Terrestrial
- Front legs slightly raptorial
- Simple metamorphosis
- Sucking
 mouthparts
- Feed on other insects
- Antennae medium to long,
 jointed



100 COMMON INSECTS

- ORDER HEMIPTERA – Damsel Bug
- Wingless or winged as adults
- Terrestrial
- Front legs slightly raptorial
- Simple metamorphosis
- Sucking
 mouthparts
- Feed on other insects
- Antennae medium to long,
 jointed



100 COMMON INSECTS

- ORDER HEMIPTERA – Seed Bug
- Winged as adults
- Terrestrial
- Simple metamorphosis
- Sucking
 mouthparts
- Most feed on plants
- Antennae medium,
 jointed



100 COMMON INSECTS

- ORDER HEMIPTERA – Leaf-footed Plant Bug
- Winged as adults
- Terrestrial
- Hind legs often with flattened, leaf-like edges
- Simple metamorphosis
- Sucking mouthparts
- Feed on plants
- Antennae medium to long, jointed



100 COMMON INSECTS

- ORDER HEMIPTERA – Stink Bug
- Winged as adults
- Terrestrial
- Simple metamorphosis
- Sucking
 mouthparts
- Most feed on plants, few
 are predatory
- Antennae medium,
 jointed



100 COMMON INSECTS

- ORDER HOMOPTERA – Cicada
- Winged as adults
- Terrestrial
- Males “sing” from trees in summer
- Simple metamorphosis
- Sucking mouthparts
- Feed on plant sap
- Antennae short, bristle-like



100 COMMON INSECTS

- ORDER HOMOPTERA – Treehopper
- Winged as adults
- Terrestrial
- Pronotum extending over abdomen
- Simple metamorphosis
- Sucking mouthparts
- Feed on plant sap
- Antennae short, bristle-like



100 COMMON INSECTS

- ORDER HOMOPTERA – Leafhopper
- Usually winged as adults
- Terrestrial
- Hind legs with comb-like arrangement of spines
- Simple metamorphosis
- Sucking mouthparts
- Feed on plant sap
- Antennae short, bristle-like



100 COMMON INSECTS

- ORDER HOMOPTERA – Planthopper
- Winged as adults
- Terrestrial
- Usually with “circlets” of spines
on hind legs
- Simple metamorphosis
- Sucking
mouthparts
- Feed on plant sap
- Antennae short,
bristle-like



100 COMMON INSECTS

- ORDER HOMOPTERA – Aphid
- Wingless or winged as adults
- Terrestrial
- With tube-like projections
(cornicles) on
abdomen
- Simple metamorphosis
- Sucking
mouthparts
- Feed on plant sap
- Antennae medium to long,
bristle-like

Photo by J. Scott Bundy



100 COMMON INSECTS

- ORDER HOMOPTERA – Scale Insect
- Winged only in male (two wings)
- Terrestrial
- Adult females and immatures usually covered by shield-like materials
- Simple metamorphosis
- Sucking mouthparts
- Feed on plant sap
- Antennae short, bristle-like



100 COMMON INSECTS

- ORDER NEUROPTERA – Green Lacewing
- Adults with many-veined wings
- Terrestrial
- Complete metamorphosis
- Chewing
mouthparts
- Predators on aphids
- Antennae long,
thread-like



100 COMMON INSECTS

- ORDER NEUROPTERA – Antlion
- Adults with many-veined wings
- Terrestrial
- Complete metamorphosis
- Chewing
mouthparts
- Larvae predatory, build pits
in sand
- Antennae short,
clubbed



100 COMMON INSECTS

- ORDER COLEOPTERA – Tiger Beetle
- Anterior wings hardened
- Terrestrial
- Complete metamorphosis
- Chewing
mouthparts
- Predatory
- Antennae moderately long,
thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Ground Beetle
- Anterior wings hardened
- Terrestrial
- Complete metamorphosis
- Chewing
mouthparts
- Predatory
- Antennae moderately long,
thread-like



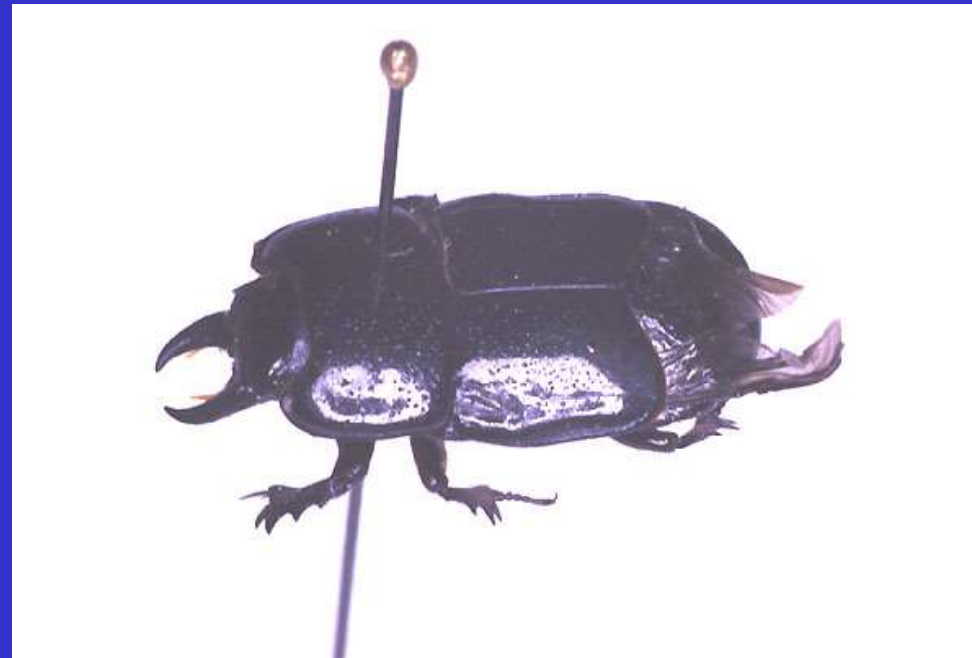
100 COMMON INSECTS

- ORDER COLEOPTERA – Diving Beetle
- Anterior wings hardened
- Aquatic
- Hind legs oar-like
- Complete metamorphosis
- Chewing
mouthparts
- Predatory
- Antennae moderately long,
thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Hister Beetle
- Anterior wings hardened
- Terrestrial
- Shiny, seed like beetles
- Complete metamorphosis
- Chewing
mouthparts
- Predatory
- Antennae short, clubbed



100 COMMON INSECTS

- ORDER COLEOPTERA – Water Scavenger Beetle
- Anterior wings hardened
- Aquatic
- Hind legs oar-like
- Complete metamorphosis
- Chewing
 mouthparts
- Scavengers as adults
- Antennae short,
 thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Carrion Beetle
- Anterior wings often short and hardened
- Terrestrial
- Legs normal
- Complete metamorphosis
- Chewing
 mouthparts
- Feed on carrion
- Antennae short, clubbed



100 COMMON INSECTS

- ORDER COLEOPTERA – Rove Beetle
- Anterior wings short and leathery
- Mostly terrestrial
- Legs normal
- Complete metamorphosis
- Chewing
mouthparts
- Predators and scavengers
- Antennae moderately long,
thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Soldier Beetle
- Anterior wings leathery
- Terrestrial
- Usually yellow and black or orange and black
- Complete metamorphosis
- Chewing mouthparts
- Predatory larvae, adults feed on pollen
- Antennae moderately long, thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Dermestid Beetle
- Anterior wings hardened
- Terrestrial
- Often with scales or hairs on elytra
- Complete metamorphosis
- Chewing
 mouthparts
- Most feed on dead
 animal material
- Antennae short, clubbed

Photo by Jeff Drake



100 COMMON INSECTS

- ORDER COLEOPTERA – Soft-winged Flower Beetle
- Anterior wings leathery
- Terrestrial
- Usually Brightly colored
- Complete metamorphosis
- Chewing
mouthparts
- Predatory or feed on
pollen
- Antennae short,
sometimes with
basal segments
enlarged



100 COMMON INSECTS

- ORDER COLEOPTERA – Checkered Beetle
- Anterior wings hairy
- Terrestrial
- Often with black, red or orange markings
- Complete metamorphosis
- Chewing mouthparts
- Predatory
- Antennae clubbed or filament-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Click Beetle
- Anterior wings hardened
- Terrestrial
- Usually dark colored
- Can right themselves
by clicking
- Complete metamorphosis
- Chewing
mouthparts
- Generally plant feeders
- Antennae moderate,
thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Metallic Wood-Boring Beetle
- Anterior wings hardened
- Terrestrial
- Often metallic, but some dark colored
- Complete metamorphosis
- Chewing mouthparts
- Larvae in wood, adults feed on plants
- Antennae moderate thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Sap Beetle
- Anterior wings short
- Terrestrial
- Usually brown or black
- Complete metamorphosis
- Chewing
 mouthparts
- Scavengers
- Antennae short and clubbed

Photo by S. Liesner



100 COMMON INSECTS

- ORDER COLEOPTERA – Ladybird Beetle
- Hemispherical in body shape
- Terrestrial
- Often red, orange or yellow with black spots, but sometimes either black or black with red spots
- Complete metamorphosis
- Chewing mouthparts
- Predatory (few plant-feeders)
- Antennae short and clubbed



100 COMMON INSECTS

- ORDER COLEOPTERA – Blister Beetle
- Anterior wings variable
- Terrestrial
- Adults produce cantharidin
- Often spotted or striped, but some metallic
- Complete metamorphosis
- Chewing mouthparts
- Parasitic as larvae, plant-feeders as adults
- Antennae moderate, thread-like



100 COMMON INSECTS

- ORDER COLEOPTERA – Darkling Beetle
- Anterior wings hardened,
often fused
- Terrestrial
- Often confused with ground
ground beetles
- Usually black
- Complete metamorphosis
- Chewing
mouthparts
- Scavengers or eaters of
stored grains
- Antennae moderate,
thread-like or beaded



100 COMMON INSECTS

- ORDER COLEOPTERA – Twig Borer
- Anterior wings hardened
- Terrestrial
- Usually dark-colored
- Complete metamorphosis
- Chewing
 mouthparts
- Body elongated, borer
 in stems
- Antennae short, clubbed



100 COMMON INSECTS

- ORDER COLEOPTERA – Scarab Beetle
- Anterior wings hardened
- Terrestrial
- Color variable
- Complete metamorphosis
- Chewing
 mouthparts
- Body usually thick
- Antennae elbowed, lamellate
- Larvae include white grubs



100 COMMON INSECTS

- ORDER COLEOPTERA – Long-horned Beetle
- Anterior wings usually hardened
- Terrestrial
- Color varies
- Eyes usually notched
- Complete metamorphosis
- Chewing
mouthparts
- Body often elongated,
borer in stems as larvae
- Antennae short to very long
sometimes serrate



100 COMMON INSECTS

- ORDER COLEOPTERA – Leaf Beetle
- Anterior wings variable
- Terrestrial
- Color variable
- Complete metamorphosis
- Chewing
mouthparts
- Body variable- hemispherical
to elongated
- Antennae usually short, usually
filamentous or beaded



100 COMMON INSECTS

- ORDER COLEOPTERA – Snout Beetle (weevil)
- Anterior wings hardened
- Terrestrial
- Color variable
- Mandibles on snout
- Many pest species
- Complete metamorphosis
- Chewing
mouthparts
- Antennae short, clubbed



100 COMMON INSECTS

- ORDER COLEOPTERA – Bark Beetle
- Anterior wings hardened
- Body pill-shaped, usually tiny
- Wood borers under bark
- Terrestrial
- Usually dark-colored
- Complete metamorphosis
- Chewing
mouthparts
- Antennae short, clubbed



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Swallowtail
- Our largest butterflies
- Color variable, many with black and yellow
- Hind wings usually with tails
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking mouthparts
- Antennae moderate, clubbed

Photo by Jeff Drake



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Sulfur Butterfly
- Size variable
- Color usually yellow and black or white and black
- Hind wings without tails
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae moderate, clubbed



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Gossamer-winged Butterfly
- Small (including our smallest butterfly)
- Color variable, often metallic blue
- Hind wings with or without tails
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae moderate, clubbed



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Brush-footed Butterfly
- Size variable
- Color variable
- Front legs short, not used
- Hind wings without tails
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
mouthparts
- Antennae moderate, clubbed



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Skipper
- Size variable
- Color usually dark, often with spots
- Hind wings with or without tails
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae moderate, clubbed,
 usually hooked



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Sphinx Moth
- Size variable, but most large
- Many cryptic when at rest
- Body bullet-shaped
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae moderate in length,
 tapered or baseball bat-shaped



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Giant Silkworm Moth
- Usually large to very large
- Color varies, often with eye-spots
 - on hind wing or both
 - hind wing and forewing
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 - mouthparts
- Antennae feathery,
 - more so in males



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Geometer Moth
- Usually small
- Colors usually pale, occasionally pastel green
- Wings sometimes angulate or scalloped
- Larvae feed on plants
- Larvae called “inch worms”
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae usually thread-like



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Tiger Moth
- Size usually medium
- Color usually very light, often white, or brightly colored sometimes with spots
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking mouthparts
- Antennae thread-like



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Noctuid Moth
- Size variable
- Color usually dark, often
with mottled appearance
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
mouthparts
- Antennae thread-like
- Large number of pest species



100 COMMON INSECTS

- ORDER LEPIDOPTERA – Pyralid Moth
- Size usually small
- Color often very light, often white
- Palpi usually prominent (snout)
- Larvae feed on plants
- Adults feed on nectar
- Terrestrial
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae thread-like

Photo by Howard Beuhler



100 COMMON INSECTS

- ORDER DIPTERA – Mosquito
- Size small
- One pair of wings
- Color variable
- Wing veins with scales
- Adult females feed on blood
- Adult males feed on nectar
- Larvae feed on microorganisms or sometimes predators
- Aquatic as larvae
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae feathery to
 thread-like with bristles



100 COMMON INSECTS

- ORDER DIPTERA – Black Fly
- One pair of wings
- Size very small
- Body compact, humpbacked
- Color dark- gray to black
- Adult females feed on blood
- Larvae feed on microorganisms
- Aquatic as larvae
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae short and stubby
 Photo by S. Liesner



100 COMMON INSECTS

- ORDER DIPTERA – Horse Fly
- Size medium to large
- One pair of wings
- Color black to brown or gray
- Eyes often prismatic or metallic green
- Adult females feed on blood
- Larvae feed on microorganisms
- Aquatic as larvae
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae short and stubby



100 COMMON INSECTS

- ORDER DIPTERA – Robber Fly
- One pair of wings
- Size small to large
- Color variable, but usually gray or brown
- Adults feed on other insects
- Larvae predatory in soil
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae short, bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Bee Fly
- One pair of wings
- Size small to medium large
- Color usually brown, body fuzzy
- Adults feed on nectar or other insects
- Larvae parasitic on other insects
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae small bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Syrphid Fly
- Size small - medium
- One pair of wings
- Color variable, but often bee or wasp-like
- Spurious wing vein
- Adults feed on nectar
- Larvae feed on aphids,
plants or microorganisms
- Complete metamorphosis
- Sucking
mouthparts
- Antennae bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Picture-Wing Fly
- Size small
- One pair of wings
- Color variable, but usually with dark bands or spots on wings
- Adults feed on damaged fruit
- Larvae scavengers or feed on plants
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Louse Fly
 - Size small
 - Wingless
 - Color brown to black
 - Adults feed on blood
 - Larvae born ready to pupate
 - Complete metamorphosis
 - Sucking
mouthparts
 - Antennae short and stubby
- Photo by S. Liesner



100 COMMON INSECTS

- ORDER DIPTERA – Muscid Fly
- Size small
- One pair of wings
- Color usually gray, with spotted abdomen
- Adults feed on many things,
 some on blood
- Larvae scavengers
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Tachinid Fly
- Size small to medium large
- One pair of wings
- Color variable, may look like bees
- Adults feed on nectar
- Larvae parasitoids
- Complete metamorphosis
- Sucking
 mouthparts
- Antennae bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Blow Fly
- Size medium
- One pair of wings
- Color usually metallic blue, green or purple
- Adults feed on nectar
- Larvae scavengers on carrion and dung
- One- the screw worm fly is major pest of livestock
- Complete metamorphosis
- Sucking mouthparts
- Antennae bristle-like



100 COMMON INSECTS

- ORDER DIPTERA – Flesh Fly
- Size Medium
- One pair of wings
- Color usually gray, with checkered abdomen, often with red spot at tip
- Adults feed on nectar and other fluids
- Larvae scavengers or parasitoids
- Complete metamorphosis
- Sucking mouthparts
- Antennae bristle-like



100 COMMON INSECTS

- ORDER SIPHONAPTERA – Flea
- Size small
- Wingless
- Laterally flattened
- Color usually dark
- Adults feed on blood
- Larvae scavengers on
dried blood, adult feces
- Complete metamorphosis
- Sucking
mouthparts
- Antennae short

Photo by S. Liesner



100 COMMON INSECTS

- ORDER Hymenoptera – Braconid Wasp
- Size small to medium
- One recurrent vein in forewing
- Color variable
- Adults feed on nectar
- Larvae parasitoids on other insects
- Complete metamorphosis
- Chewing mouthparts
- Antennae filamentous, with 16 or more segments

Photo Joe Ellington's lab



100 COMMON INSECTS

- ORDER Hymenoptera – Ichneumon Wasp
- Size small to large
- Two recurrent veins in forewing
- Color variable
- Adults feed on nectar
- Larvae parasitoids on other insects
- Complete metamorphosis
- Chewing mouthparts
- Antennae filamentous, with 16 or more segments



100 COMMON INSECTS

- ORDER Hymenoptera – Chalcidid Wasp
- Size small to medium
- Few wing veins
- Hind femora enlarged
- Color variable
- Adults feed on nectar
- Larvae parasitoids on other insects
- Complete metamorphosis
- Chewing mouthparts
- Antennae short with 13 or fewer segments



100 COMMON INSECTS

- ORDER Hymenoptera – Tiphiid Wasp
- Size small to medium
- Usually solid brown or banded yellow and black
- Body slender
- Adults feed on nectar
- Larvae parasitoids on white grubs
- Complete metamorphosis
- Chewing mouthparts
- Antennae 12-13 segmented

Photo by Jeff Drake



100 COMMON INSECTS

- ORDER Hymenoptera – Scoliid Wasp
- Size medium to large
- Forewings with wrinkles (crenulations)
- Color yellow banded or with red on abdomen
- Adults feed on nectar
- Larvae parasitoids on white grubs
- Complete metamorphosis
- Chewing mouthparts
- Antennae filamentous
- Antennae 12-13 segmented



100 COMMON INSECTS

- ORDER Hymenoptera – Velvet Ant
- Size small to medium-large
- Females lacking wings
- Males resemble scoliids, but lack wing wrinkles
- Color variable, but often red and black
- Adults feed on nectar
- Larvae parasitoids on bees and wasps
- Complete metamorphosis
- Chewing mouthparts
- Antennae 12-13 segmented



100 COMMON INSECTS

- ORDER Hymenoptera –Ant
- Size small to medium
- All social
- Only reproductives have wings
and then only prior to mating flights
- Color variable, but often red
and/or black
- Adults feed on many different foods
- Larvae fed by adult workers
- Complete metamorphosis
- Chewing mouthparts
- Antennae elbowed, 6-13-segmented



100 COMMON INSECTS

- ORDER Hymenoptera – Spider Wasp (including tarantula hawk - State Insect of New Mexico)
- Size small to very large
- Color variable, but often black
or black with orange wings
- Adults feed on nectar
- Larvae feed on paralyzed spiders
- Complete metamorphosis
- Chewing mouthparts
- Antennae often curl in females



100 COMMON INSECTS

- ORDER Hymenoptera – Vespid Wasp
- Size usually medium
- Often, but not always, social
- Color variable, but often with pattern of brown or black and yellow
- Adults feed on nectar
- Larvae either fed by adults or provisioned
- Complete metamorphosis
- Chewing mouthparts



100 COMMON INSECTS

- ORDER Hymenoptera – Sphecid Wasp
- Size small to large
- Color variable, but often metallic, or yellow and black or brown
- Adults feed on nectar
- Larvae usually provisioned with paralyzed prey
- Complete metamorphosis
- Chewing mouthparts



100 COMMON INSECTS

- ORDER Hymenoptera – Helictid Bee
- Size small to medium
- Color variable, but often metallic green, metallic green and yellow, or dull black
- Adults feed on pollen
- Larvae provisioned
- Complete metamorphosis
- Chewing mouthparts
- Antennae elbowed



100 COMMON INSECTS

- ORDER Hymenoptera – Leafcutting Bee
- Size small to medium-
- Color variable, but often gray or black
- Adults feed on pollen
- Pollen carried on abdomen
- Two submarginal cells
in forewings
- Larvae provisioned
- Complete metamorphosis
- Chewing mouthparts
- Antennae elbowed



100 COMMON INSECTS

- ORDER Hymenoptera – Honey Bee (including Bumble Bee)
- Size medium to large
- Social
- Three submarginal cells in forewings
- Color variable, but usually
brown and black or
yellow and black
- Adults feed on honey made from nectar
- Larvae fed by adults
- Complete metamorphosis
- Chewing (lapping) mouthparts
- Antennae elbowed



INSECT IDENTIFICATION CONTEST (as of 2005)

- 25 stations
- Four questions per station (total 100)
- Based on “100 COMMON INSECTS OF NEW MEXICO” Revised June 2001.
- Questions
 - Common Name
 - Order
 - Metamorphosis
 - Mouthparts

INSECT IDENTIFICATION CONTEST (as of 2005)

- Magnifying lenses are encouraged
- Scantron required
- No notes or books allowed
- No. 2 pencil used to fill in scantrons
- One minute per station
- 5 minutes allowed at end of contest for rechecking difficult specimens
- Only one person at a station at any one time

INSECT IDENTIFICATION CONTEST (as of 2005)

Sample Questions

- What is the common name of this arthropod?
a) Spider, b) Scorpion, c) Centipede, d) Tick
- To which order does this arthropod belong?
a) Scorpiones, b) Araneae, c) Acari,
d) Coleoptera
- What type of metamorphosis?
a) None, b) Simple, c) Complete
- What type of mouthparts?
a) Chewing, b) Sucking, c) Both



INSECT IDENTIFICATION CONTEST (as of 2005) Sample Questions

- What is the common name of this arthropod?
a) Cricket, b) Scorpion, c) Short-horned Grasshopper, d) Jerusalem Cricket
- To which order does this arthropod belong?
a) Scorpiones, b) Orthoptera, c) Coleoptera, d) Odonata
- What type of metamorphosis?
a) None, b) Simple, c) Complete
- What type of mouthparts?
a) Chewing, b) Sucking, c) Both

